RAILROAD MAN'S MAGAZINE

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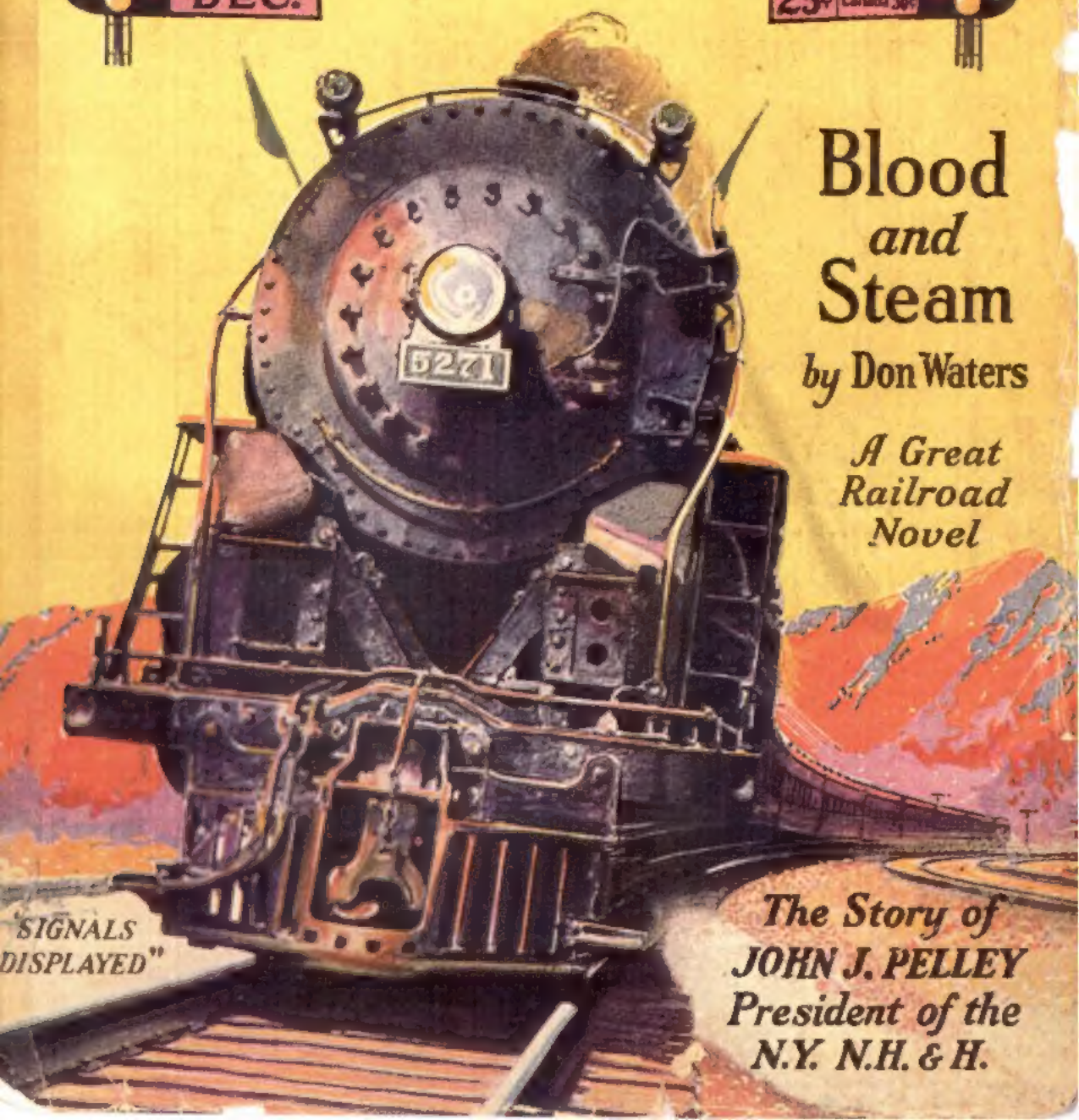

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by Don Waters

A Great Railroad Novel

"SIGNALS DISPLAYED"

The Story of JOHN J. PELLEY President of the N.Y. N.H. & H.

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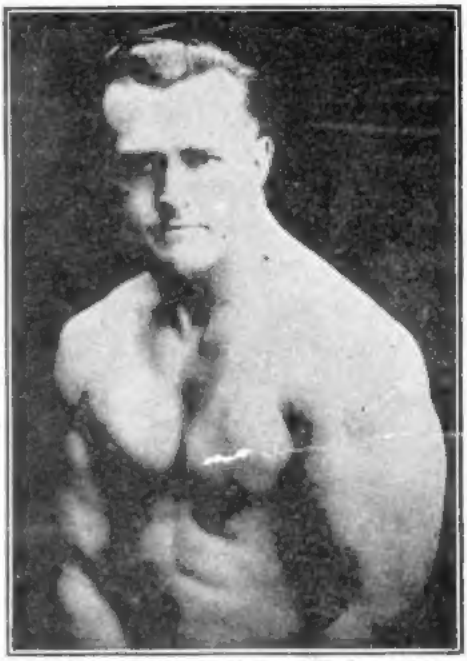
Can You Do These Things?

Lift 200 lbs. or more overhead with one arm; bend and break a horseshoe; tear two decks of playing cards; bend spikes; chin yourself with one hand.

CAN you do any of them? I can and many of my pupils can. It is remarkable the things a man really can do if he will make up his mind to be strong. It is natural for the human body to be strong. It is unnatural to be weak. I have taken men who were ridiculed because of their frail make-up and developed them into the strongest men of their locality.



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I Want You for 90 Days

These are the days that call for speed. It once took four weeks to cross the ocean—now it takes less than one. In olden days it took years to develop a strong, healthy body. I can completely transform you in 90 days. Yes, make a complete change in your entire physical make-up. In 30 days I guarantee to increase your biceps one full inch. I also guarantee to increase your chest two inches. But I don't quit there. I don't stop till you're a finished athlete—a real strong man. I will broaden your shoulders, deepen your chest, strengthen your neck. I will give you the arms and legs of a Hercules. I will put an armor plate of muscle over your entire body. But with it come the strong, powerful lungs which enrich the blood, putting new life into your entire being. You will be bubbling over with strength, pep and vitality.

A Doctor Who Takes His Own Medicine

Many say that any form of exercise is good, but this is not true. I have seen men working in the factories and mills who literally killed themselves with exercise. They ruined their hearts or other vital organs, ruptured themselves or killed off what little vitality they possessed.

I was a frail weakling myself in search of health and strength. I spent years in study and research, analyzing my own defects to find what I needed. After many tests and experiments, I discovered a secret of progressive exercising. I increased my own arms over six and a half inches, my neck three inches and other parts of my body in proportion. I decided to become a public benefactor and impart this knowledge to others. Physicians and the highest authorities on physical culture have tested my system and pronounced it to be the surest means of acquiring perfect manhood. Do you crave a strong, well-proportioned body and the abundance of health that goes with it? Are you true to yourself? If so, spend a pleasant half hour in learning how to attain it. The knowledge is yours for the asking.

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RAILROAD MAN'S MAGAZINE

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DECEMBER, 1929

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THE FRANK A. MUNSEY COMPANY, 280 Broadway, New York, and
LONDON: HACHETTE & CIE., 16-17 King William Street, Charing Cross, W. C. 2
PARIS: HACHETTE & CIE., 111 Rue Réaumur
WILLIAM T. DEWART, President and Treasurer — C. T. DIXON, Vice President
PUBLISHED EVERY MONTH AND COPYRIGHT, 1929, BY THE FRANK A. MUNSEY COMPANY

Single copies, 25 cents. By the year, $2.50 in United States, its dependencies, Mexico and Cuba; $3.00 to Canada and Foreign Countries. Remittances should be made by check, express money order or postal money order. Currency should not be sent unless registered

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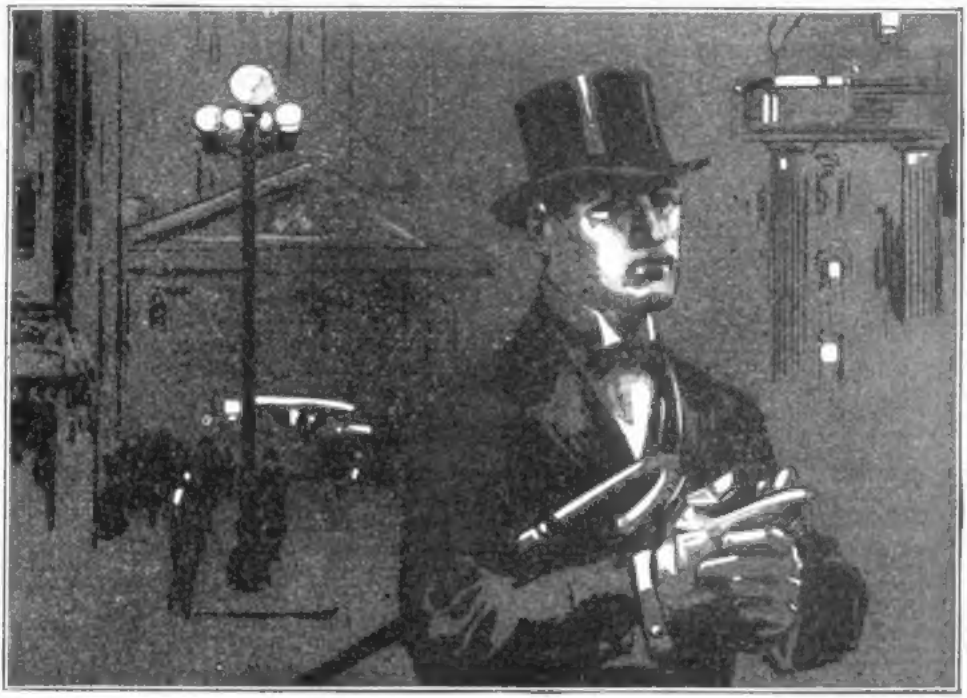

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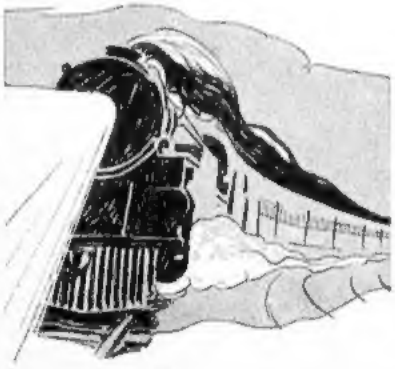

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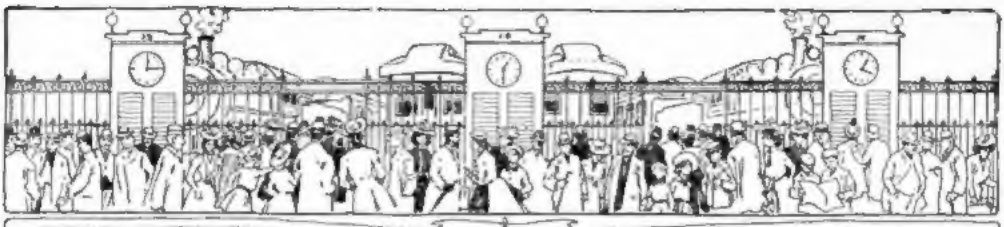


THE COME BACK

By Lydia M. Dunham O'Neil

THEY called me to the telephone and read the cable out:
My lips could barely whisper, but my heart began to shout.
A thrill went through my shoulder-blades and stung me like a flame—
"The RAILROAD MAN'S is coming back to play the railroad game!"
Her joints are dull and rusty, she's rather more than dusty,
The way that we've neglected her has been a crying shame;
But we'll polish her and oil her—like an only child we'll spoil her,
Now she's coming back again to the good old railroad game!

We shoved her in the roundhouse and we banged the roundhouse door,
And then put on our uniforms and went away to war.
The dust of years has covered her, but never dimmed her fame,
And now she's coming back again, to play the railroad game.
She hasn't got up steam yet, she's kind-of in a dream yet,
But bring a wad of cotton waste and watch us make her shine;
Oh, hostler, get her ready, and, fireboy, keep her steady,
And watch the good old RAILROAD MAN'S go rolling down the line!

The aeroplane can have the sky, the ships can have the sea;
The railroad and the RAILROAD MAN'S are good enough for me.
An open way, a tested track, a solid ballast-bed—
So fling the throttle open wide and give the girl her head!
Oh, listen to her croon again, the same old golden rune again!
Romance is just around the curve, and everything's the same
As in the days before the war; we're loaded up with railroad lore,
And the RAILROAD MAN'S is back again, to play the railroad game!

Photo by Campbell Studios

JOHN J. PELLEY

President of the New York, New Haven & Hartford Railroad

RAILROAD MAN'S MAGAZINE

Vol. I — For the Whole Family — No. 1

DECEMBER, 1929

Track Hand To President

John J. Pelley, of the New Haven, Pulled the Pin on a Teaching Job at Nineteen, Joined a Track Gang and Battled to Railroad Heights On Three Big Systems

By Virginia F. Cullen

ONE night not so long ago a new man in New England got up to respond to a toast at the Hartford Club. All around the tables sat important people—big merchants and shippers, bankers, top-notchers in the professions, steamship people—a gilt-edged crowd. They sized up the newcomer from head to foot, appraising him with Yankee keenness.

He had come up from the deep South to head about the biggest business in New England, to rebuild and restore about the most important concern in New England, and they figured that he would have a lot to say in the way of compliments and promises and predictions—what the vulgar call "apple sauce." They sat back and drew on their dollar cigars and waited for the good old stuff.

They didn't get it. Their yardsticks didn't fit this piece of goods. Their ways of playing the old games were not his, good and useful ways though they may have been. When he got up to say his say, he looked around and flashed a brilliant smile, a smile radiating friendliness, and then spoke about thirty words. He said:

"I'll be contented to look at you and give you a look at me, so that in the future we'll know each other. I'm hopeful we'll like each other."

Then he sat down, still smiling, perfectly easy, natural, friendly. That was all he had to say. Anything else—anything in the way of flowery flattery and roseate predictions of swiftly increasing dividends from the historic corporation he had come North to take charge of—such stuff as that simply was not in him. To him it would have been beeswax and bunkum and butterflies' wings. He would wait. They would tie to him, or they wouldn't. He

would get along with them, or he wouldn't. His work would justify him, or it wouldn't. That was all there was to it.

Early the next morning he walked down to the New York, New Haven and Hartford station in the capital of Connecticut, and approached the ticket window. The man inside the Pullman office knew him instantly, and got all fussed up. The man outside flashed the same brilliant, friendly smile that he had bestowed on the bankers and merchants the previous night at the Hartford Club, and asked if there was a chair to be had on the seven forty-eight for New York.

The ticket agent turned pale from chagrin and anxiety. He stuttered and stammered. The smiling man outside the window presently gathered that there was nothing to be had in the way of a Pullman seat on the seven forty-eight.

"But we'll find something for *you*," said the agitated ticket agent. "We must find something for *you*," and he put his harried soul into the "you."

"Not at all," said the man outside. "Nothing doing. It's perfectly all right. We'll find a seat in one of the coaches. They ought to be comfortable. It's a good way to find out."

If anybody had come along with a feather at that particular moment he could have knocked the ticket agent flat with it. For the agent was out on his feet. He had never seen or heard of anything like that. The gentleman in one of the coach seats on the seven forty-eight didn't think anything about it at all. He was too busy trying to make a bid of four hearts stand up within five minutes after the train slid out of Hartford.

A few hours later this same chap, tall and solidly built, with his Bill Taft smile and his Jack Dempsey walk, swung into the executive offices of the New Haven Railroad in the Grand Central Terminal Building in New York. The setting was obviously unfamiliar to him, but he strode along, with a suitcase swinging from each arm, as if he had an instinct for finding railroad presidents' offices no matter how skillfully they were hidden. He forged along until he got to Room 3040, and there he found a flock of secretaries and clerks. He put down the suitcases and stood in the doorway, with his soft gray hat in his hand, smiling the smile which must be copyrighted in the Congressional Library or the Patent Office or somewhere.

The boys and girls got to their feet in a flutter. They knew who it was, all right, because the grapevine had been working; but they never expected anything like this.

"Hello, everybody!" said the tall man.

He paused a moment, his eyes sweeping the group. Then, advancing into the office, he offered his hand to one of the secretaries.

"My name," said he, "is Pelley—what's yours?"

"Sullivan," replied the secretary, his eyes popping, while the clerks and secretaries all around looked as if they were seeing something upon the stage of a theater. "Your office is right here, Mr. Pelley. We are all ready for you, sir."

"Thank you," replied the tall man with the Southern tan, and with that John Jeremiah Pelley, the brand-new president of the much troubled New York, New Haven and Hartford Railroad walked into the luxuriously furnished and decorated private office that had been prepared for him, and entered upon his duties.

Outside the private office, in the anterooms, were a whole group of people who could have been knocked over with a feather just as easily as the Hartford ticket agent. They had never seen a new railroad president take hold that way. What's more, they had prouder of their organization and a little more desirous of furthering its welfare. Most of all, and most important, they saw that they were going to work for a human being and not for some invisible autocrat or a soulless corporation. All the way down the

HUSTLING BAGGAGE ON THE ANNA PLATFORM

never heard of a new railroad president taking hold that way — no fuss and feathers, no high hat stuff, no ignoring of the hired hands, nothing of the high and mighty and great I Am.

A kind of thrill went through the executive offices of the New Haven Railroad that day. Something new and vital had entered into the feel of things, something keen and clean and brisk, like a breeze from the northwest. The secretaries and clerks held their heads a little higher. Somehow they thought better of themselves, in the right sort of way. They felt a little line, from Hartford to New York, the new president had left that impression.

He Regards Your Time

One feels it now when one calls on Mr. Pelley in his private office. For a railroad president he is mighty easy to get to, if you have any real business. Nobody has to waste half a day running the gantlet of brass rails and pert underlings. You are shown straight into the big room where the president sits at his flat-topped desk. While he flashes the Pelley smile and gives you the Pelley handshake, you

have a chance to size up the outer man and get a line on the inner as well. It doesn't take long to figure out why he rose to the headship of two great railroad systems—the Central of Georgia, and the New Haven.

He's just under six feet, with the well conditioned figure of an athlete, hard and supple and quick. At fifty-one he looks forty-five, or less. One of the reasons why he looks so young and vital and competent is that he has always known how to play. The chances are ten to one that if the railroad presidents of the United States met in a golf tournament, Pelley would be the Bobby Jones of the tournament. He can shoot under eighty when he is going well. To see John Pelley hit one off the tee, a wallop of two hundred and fifty yards down the fairway, is quite a sight, and he's no duffer when it comes to the old brassie, or the short pitch to the green, or the cunning putt.

At auction bridge he is probably in the second flight. His mind delights in the intricacies and stratagems of that intellectual game. He also likes to fork a good horse, as they say out West. He can dance like a twenty-year-old—and does.

His downright naturalness of manner and speech emerges in the first minute of any talk with him. The man is distinctly himself, as natural as a tree. There is no posing or striking of attitudes or platitudinal beatings of the bass drum. If he likes you, he likes you, and shows it. If he doesn't, he is courtesy itself, but the interview is short. Distaste of bunk—all kinds of bunk—copy book maxim bunk, big executive bunk, all the kinds there are—stands out in him.

As he talks, he smiles the same natural, easy smile that has lighted his way in railroading for twenty-nine years, from track roustabout to the president's office. It is the smile of a man who finds that all's right with the world if you treat it right and do your part, and to whom all the world is a friend. He gives the impression that nothing at all could reduce him to brusqueness, just as it seems that no power on earth could erase that smile.

The smile is important. It serves to soften the lines of an unusually square chin—a chin that bespeaks a firm and unrelenting determination. He would not be an easy man to fool or a safe man to fool with. Plenty of people have discovered that fact.

His face is open and frankly expressive. There isn't a vestige of the stuffed shirt or the tin god perceptible in him. If he has any secret, it is a secret from himself. To search for hidden meanings or innuendos in his talk is a waste of time. He is direct, frank, outspoken, friendly. He lets you feel that until you show him differently, you are aces high with him.

As he talks, he looks directly at you. There is no hesitation in his speech, and he does not pause to pick his words. He says what he has to say in the simplest possible manner, and without a trace of affectation.

Several years in the South failed to give him a trace of Southern accent, but his voice has the smoothness of the educated and well bred Southern gentleman's. He radiates so much friendliness that you feel he could make a pal of even the sourest Westchester commuter with long-time grievances against the road.

Having in mind his fine career of accomplishment in three great railroad systems—he has already begun to do things on the New Haven—this writer was moved to ask him what chance a poor boy had to-day to get to the top

in railroading or any other great American activity. Had the day of opportunity passed for the boy from the farm or workshop? Was it true that chances to get ahead in the various fields of business are much more limited than when he chucked his school-books for a pair of blue jeans twenty-five years ago? There's a lot of such talk nowadays among young people. It would be interesting to hear what Pelley thought.

"Plain nonsense!" Mr. Pelley said. "What is the biggest factor about railroading to-day, just as it was twenty-five years ago, or at any other time? I like to think of the man who, while talking with a railroad executive, was asked which part of the railroad he considered most important.

"'The tracks,' replied the man.

"'No,' the executive told him. 'Not the tracks.'

"'Well, then, the engines.'

"'Guess again,' said the executive.

"'Well, it must be the equipment.'

"'No, it isn't the equipment, either.'

"'What on earth is it, if it is neither tracks, nor engines, nor equipment?'

"'The men,' said the executive. 'The spirit of the men.'

"That," continued Mr. Pelley, "is about the answer to your question. The human element is the biggest factor in railroading, and that goes from top to bottom of the organization—always has and always will. Since that is so, any young man who puts his heart into his job, who is determined to get ahead, who has honest, clean ambition, who is willing to work and, more especially, to take time to learn the job of the man just above him, is bound to get ahead. Nothing can stop young fellows of that brand in any line of industry.

"Some people chatter a lot about 'pull,' and how important it is to have a 'drag' with somebody high up. There's nothing sillier. Pull has little or nothing to do with the action of railroad directors when they go about seeking a man for a job, or with railroad executives. The big thing for a young man who wants to get ahead in railroading is to find out, first of all, if he likes the game—if railroading means more to him than any other kind of work. If a young man finds that that is true, let him go to it with his whole heart, do his best for his boss, study what his next step up calls for, and work a little harder to gain it. When such youngsters get going, you can't stop them with machine guns.

Hats Off to the Ranks

"I CAN'T give you any set formula for success. I never had one myself, and I can't recommend one for the present generation of young fellows. I don't know any rule except to get to work, to attend to your own business, and to do what you think will be pleasing to your employer. I don't go by copy book maxims at all, and never have.

"There's one thing I would like to say about the attitude of railroad or other executives. Invariably a lot of their success is due to capable and willing subordinates, to the good work of the men under them. No one man can run a railroad. He sets the pace of performance. He must be responsible for the *esprit de corps*—the spirit of the organization; but the men under him have got to be all there, or he doesn't get far. Now a great deal is due from the big executives to the good men under them. Such men are entitled to words of praise and a pat on the back now and then. There isn't a man alive who doesn't like to have a

cheerful, complimentary word from the big boss when he has done a good thing. That's the human side, and it's very important. I have always gone on the theory that railroading is a very human business."

"Should a young man going into railroading aim at some one side of the business—try to make himself a specialist in some one department?"

"Not a bit of it," said Mr. Pelley, surprisingly. "I don't hold by the idea that it is the specialist who always gets to the top. My experience has been that if a man becomes highly specialized in some phase of railroading, and is unusually efficient and valuable in that particular and restricted activity, there may be a disposition among the big executives to keep him there instead of advancing him to jobs that would ultimately land him at the top.

"In my own case, when I was with the Illinois Central as a young fellow, they found that I could do a little of this and a little of that, and they gave me a chance to try my hand at a variety of problems. Because I got the chance and had some confidence in myself, and a real liking for the game, and because I knew they believed I could do it, why, I did it. I have always found it easy to do what my superiors expected of me, and I don't believe the chance to learn from the ground up would have come my way if I had gone through college and then specialized in some particular line. I somehow feel that I wouldn't have made the grade. If I am wrong, then luck has played a big part in my career. To tell you the truth," added Mr. Pelley, "I'm inclined to think that luck went hand in hand with me, anyway. I have been a kind of Jack of all trades, one thing leading to another."

There's a lot of encouragement for young men who would like to take up railroading, but who are dubious of the opportunities offered to poor and obscure boys in this year of grace. The president of the New Haven does not say that a college education is a disadvantage. He doesn't mean that at all. What he does say is that the boy who wants to get ahead, and who feels that railroading is the field for him, can tackle fate with confidence whether he has been to college or not, provided he is willing to work for the boss as well as for himself, and to put his heart into it. Mr. Pelley believes that there are more opportunities to-day than there ever were in the past, there being so many more positions to aspire to.

"How did you get into the railroad business yourself?" Mr. Pelley was asked.

"It just came about," he replied. "I was born in Anna, Illinois, on the first day of May, 1878. At nineteen I was teaching in the high school, trying to get algebra and geometry into the heads of boys and girls not much younger than I was. I hadn't set out to be a teacher, but it was work to do, and I needed the salary. The biggest thing I got out of my teaching was the lesson that you had to know your own stuff from A to Z before you could teach it to others. I think that lesson was worth a million or two.

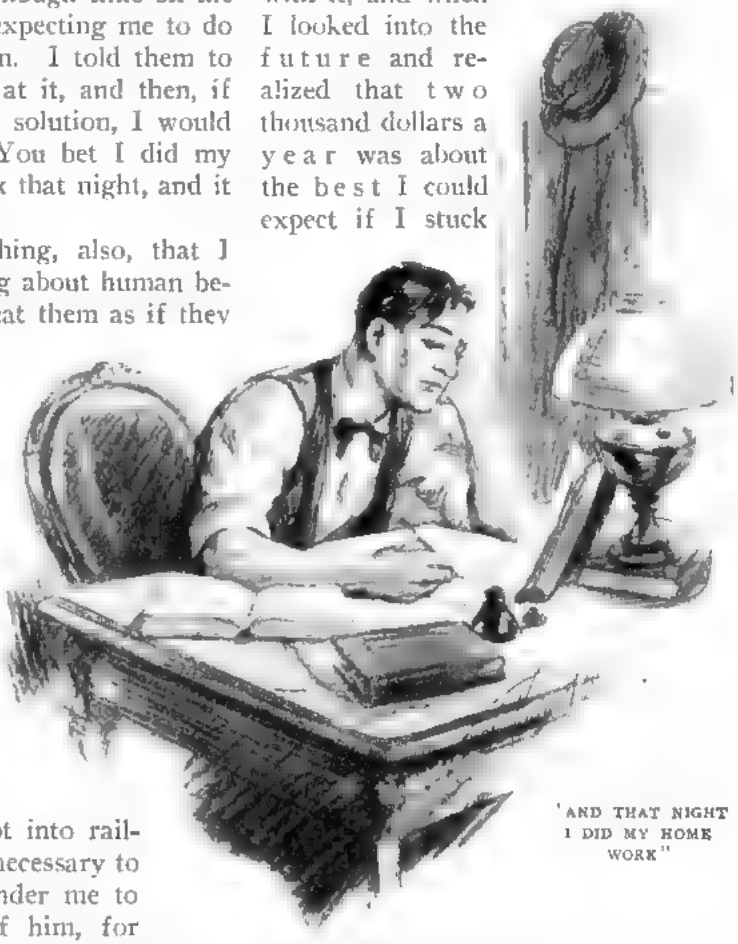
"One morning I came to school acutely aware that I was foggy about the day's lesson in algebra. I had been out larking the night before, and when I got home I was too sleepy to work out the problems that I had to put before my class. In the classroom I found out pretty quickly that not one of the pupils had been able to solve a particular equation, which was the high point of the whole lesson. One by one they confessed that they were

stumped, and one by one they looked to me to show them how. I knew that if those boys got on to me, I was a goner; so I stalled along, scolding them for not putting in enough time on the equation and then expecting me to do their work for them. I told them to have one more try at it, and then, if they couldn't find a solution, I would show them how. You bet I did my teacher's home work that night, and it taught me a lesson.

"It was in teaching, also, that I found out something about human beings. You can't treat them as if they were all made alike. They can't be handled in the mass. No two persons respond to quite the same thing. Each individual reacts differently. Some need persuasion. Some need downright firmness. It was necessary to study each boy to get the best out of him. When I got into railroading, I found it necessary to study every man under me to get the best out of him, for his own good and the company's. Employees of large organizations simply cannot be handled alike. Each man's personality must be estimated, each man's special abilities must be considered.

Mr. Pelley Dons Overalls

"WHEN I started to work for the Illinois Central, I never dreamed of becoming a railroad president, but I had always had a fancy for railroading ever since I was a kid. While teaching, I said to myself that I was going to get into railroading as soon as a chance came along. I had the title of school principal, but mighty little salary went with it, and when I looked into the future and realized that two thousand dollars a year was about the best I could expect if I stuck to teaching, I made up my mind that I was going to get out of it. I liked good clothes and a good time, and I had no more yearning for dirty hands and greasy blue jeans than any other normal boy has; but I figured out that if grimy hands and soiled jeans were the way to get a start, I would have to get used to them.



"AND THAT NIGHT I DID MY HOME WORK"

"My father had died when I was eighteen. I had had a smattering of academic work at the University of Illinois, all the college life I can boast

of. I had to quit college because my family needed a bread-winner, and I went into teaching as the handiest job around. A friend of mine was station agent and odd job man for the Illinois Central at Anna, and one summer, when he took his vacation, he asked me if I thought I could sub for him. I told him I knew I could, and when he went away I took over his job.

"There was a lot of variety to that job. That was in 1899, when I was just twenty-one, and I was full of vim and vigor. I had to be baggage smasher, yard checker, switch tender, and water boy for the locomotives. I had to look after the signal lights, make car reports, and handle all the freight in and out of town. It was good training in what you might call the fundamentals

"When that job gave out, I applied to the road for a real job, a steady one, and they took me on as track apprentice. I worked at that for awhile, always finding the time—I didn't need to find the inclination—to step out with the boys, for I liked sociability and companionship. They ragged me a good deal because I wore the best clothes I could afford. They called me a 'dude,' which was quite a term of opprobrium in those days, and a 'high stepper'; but I knew that I had to be on the spot every morning, no matter how late I had been up the night before, or how convivial the party had been. You can believe that I was on the spot. Track foremen have no sympathy with social life as I liked to live it, and I wanted to keep my job. I liked the game."

In his easy way, obviously enjoying his own reminiscences, Mr. Pelley went on to talk about his start in railroading. His first big chance came two years after the Illinois Central hired him as a track apprentice. He had made good in a small way, and wasn't impatient, knowing that he had a lot of years ahead of him.

One day the boss sent for him and gave him something to cheer about. The company was preparing to build a branch line between Reevesville and Golconda, on the Ohio River, about twenty-five miles north of Paducah, Kentucky. The boss wanted to know if Johnny Pelley thought he could hold down the job of general foreman of the construction gang that was to build the branch. Johnny said he knew he could, and the boss told him to go to it.

It was in the fall of 1902 that he tackled the seventeen miles of track building and his first executive opportunity. It looked good to him until he went down to Reevesville and found out that a strike had exploded right in his face. There wasn't any labor to be had. The branch line had to be built and in operation by the first day of January, 1903, or else the company would forfeit the right of way and a bonus of twenty-five thousand dollars put up by the hopeful citizens of the countryside. It looked pretty sour to Johnny Pelley, but he figured that he had better look over the ground and see what he could see.

He went to the stretch where the first rails were to be laid. Some of the preliminary grading had been done, but the only human being in sight was a lone negro.

"I said to that negro, 'Boy, what's your name?'" Mr. Pelley recalled with relish.

"'Jim Williams, suh,' he told me.

"'Well, Jim, looks as if you and I have got to build this branch, eh?'

"'Boss,' he said, 'I sho' kin he'p you-all. I done spiked the side line my own self.'

"That sounded encouraging, anyway, so I asked Jim if he knew of any other colored boys around who might be willing to work on the line. He said he did, and eventually he produced his brother, Barney, and another youth named Bill Brown, and the four of us went to work. We weren't many, but we were a gang, and our will was good. was tickled to death. The company liked the job so well that they made me track supervisor, and I was prouder of that promotion than of any step up that ever came to me afterward."

In 1904 the company made him supervisor of the Indiana division. He was transferred to the Memphis division in 1905, and for twenty-four

A Fireman Speaks His Mind on Mr. Pelley

It was my pleasure recently, as President of Lodge 284, B. L. F. & E., to have as guest of honor at our banquet President John J. Pelley More than three hundred members were in attendance and greeted Mr. Pelley enthusiastically, and after the splendid speech he delivered his position in the hearts of his employees was assured

Every man on the road knows that Mr. Pelley obtained his railroad education from the ground up, and that he is a practical man as well as an executive genius. In addition, he is generous with praise of his employees, which characteristic naturally tends to make him beloved

The feature for which Mr. Pelley is most admired, however, is his democracy. He recently accepted an invitation to play in the employees' golf tournament—incidentally turning in the lowest score The Worcester *Post* had the following to say:

> The New York, New Haven & Hartford Railroad held its annual employees' golf tournament the other day at New Haven. President John J Pelley was one of the two men to win top honors, having a low gross score of seventy-eight. And the man he shared the top perch with was none other than Jack Garrity, fireman on the Shore Line Express, who turned in a low net of sixty-seven
>
> The democracy of the links seems to be a genuine thing Incidentally who would have thought, a score of years ago, that a railroad fireman would ever be able to win top place in a golf tournament?

When the committee expressed its thanks to Mr. Pelley for entering the tournament, he genially replied that no thanks were due him first, because he considered it not in the least a condescension, and in addition to that, because he enjoyed it

Who wouldn't back a man of his type? We certainly do!

J. J. GALLAGHER.

"Right then the darned work engine broke down on us, and it certainly looked as if the jig was up; but while it was in the shops I searched around and turned up thirty-five negro tie loaders who were willing to 'he'p out,' as Jim said. That was the crew that built the track for me—and we built it. By December 25 we had trains running over the line, the right of way and the bonus were in the bag, and the boss years the greater part of his railroading was below Mason and Dixon's Line. They put him through the mill, handing him job after job, none of them too easy, and he tackled them all with the same smiling confidence in himself and faith in his subordinates that has marked all his career. From 1908 until 1911 he was roadmaster of the Louisiana and Tennessee divisions, and from 1912 until 1915 superintend-

ent of the Tennessee and Memphis divisions.

In those days he didn't give much thought to the great New England system that he was afterward to be called upon to head. By the time that John J. Pelley got to be a superintendent for the Illinois Central in the South, the New Haven had fallen upon evil days. A mistaken policy of trying to absorb all the trolley lines and steamship companies in and around its territory had put it upon the rocks. In its old days it had been the greatest financial institution of New England, and its securities the sure reliance of widow and orphan. In 1903 its stock was quoted at 225. In 1913, when Pelley was running the Tennessee and Memphis divisions, it had fallen to 129. After that it took a nose dive to the cat-and-dog class. Thousands of people were ruined. From 1914 until 1927 it did not pay a dollar in dividends. Then a process of upbuilding began—the restoration that Mr. Pelley has now been called upon to accelerate and insure.

By 1917 Pelley was general superintendent of the Southern lines of the Illinois Central System, with headquarters at New Orleans. He kept on doing his work in the easy, sure style that characterized him, always employing the men under him to the best advantage, always willing to divide praise and credit with them. He became general superintendent of the company's Northern lines in 1919, and held that post for two years.

In 1921 the American Railway Association needed a first-rate man in its car service division, and the Illinois Central loaned Pelley to do the work. They brought him back in 1923 and made him general manager of the whole system, promoting him to vice president in charge of operations in 1924. At the close of the summer of 1926 he was made president of the Central of Georgia, a subsidiary of the Illinois Central. They needed an able man in that Southern territory, a man familiar with the economic problems of the South, as well as a man who knew railroading.

He Learned the Country

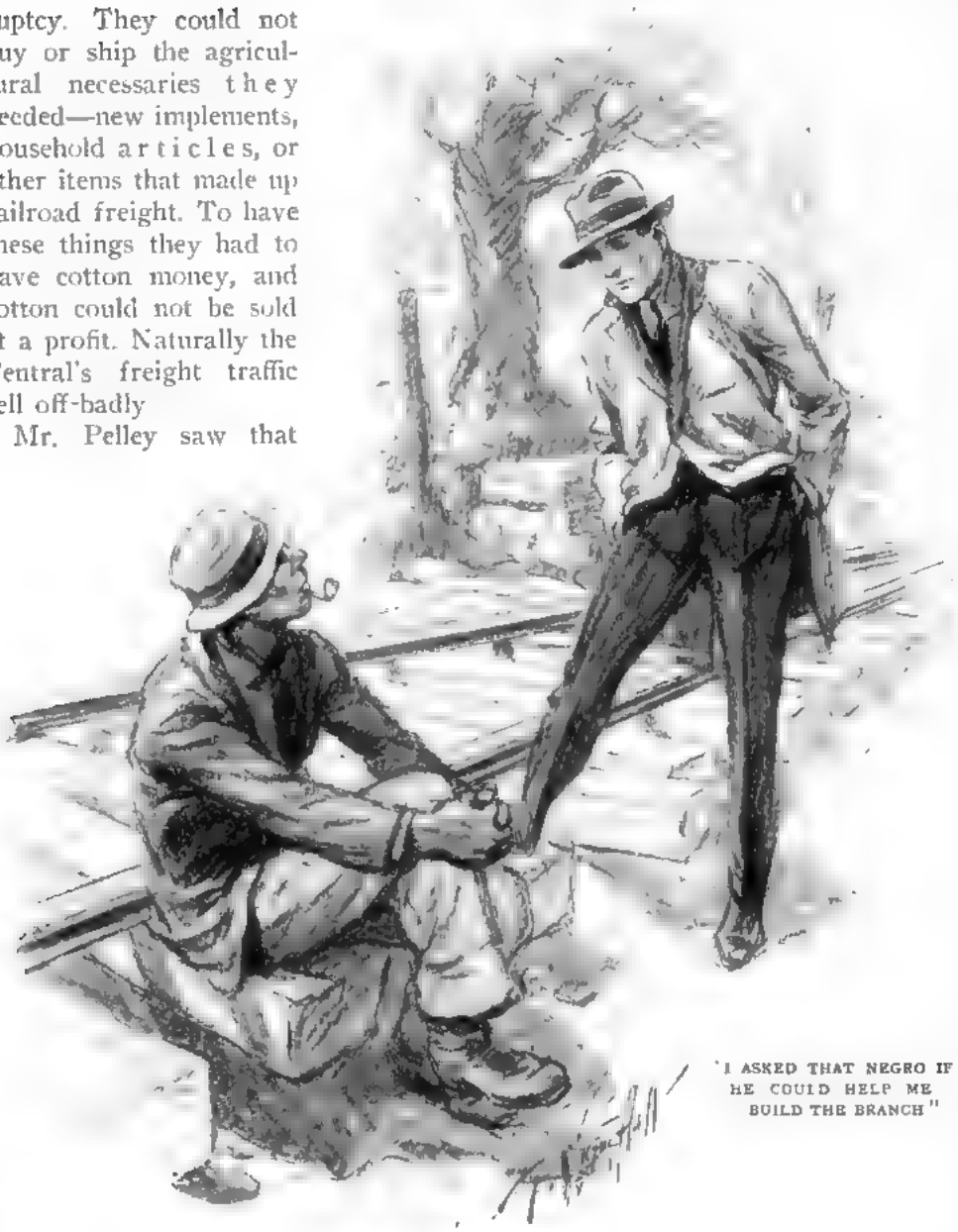
A BIG job faced him. The Central of Georgia is part of the Illinois Central system, but it is separately operated. It has its own organization and its own peculiar problems. It serves a large part of Georgia and Alabama, and reaches up into southern Tennessee, seeking freight and passengers from industrial and agricultural regions.

When Mr. Pelley took the presidency, he went to work to study the country and its necessities. He acquired a thorough knowledge of the clay and kaolin beds of Georgia, the coal fields of the upper and lower Cahaba regions of Alabama, the rich graphite belts of the same State, the fruit territories, and the immense stretches of cotton lands. He found that of the fifty-two commercial minerals found in the United States, forty-four were produced in the Central's territory in Georgia and Alabama. He saw the trend to establish textile plants in the South, close to cheap labor—plants that had been rooted for years and even for generations in New England. He had a lot to learn, and he learned it.

He took hold of the road at a critical time, in the fall of 1926, when the price of cotton, stand-by of the South, was distressingly low. In the late fall of 1926 cotton fell from a high of twenty-five cents a pound to such low figures that the planters faced bank-

ruptcy. They could not buy or ship the agricultural necessaries they needed—new implements, household articles, or other items that made up railroad freight. To have these things they had to have cotton money, and cotton could not be sold at a profit. Naturally the Central's freight traffic fell off badly

Mr. Pelley saw that something had to be done, and the first thing that had to be done, much as he hated to do it, was to cut down operating expenses—pay rolls. He had always believed in paying the best possible wages, but in the plight of the country, and especially in the crisis of his road, he had to cut pay. It was a groundhog case. The way he did it was to speak directly to all of his ten thousand employees and tell them frankly what the conditions were. Would they help out for the time being until circumstances got better?



"I ASKED THAT NEGRO IF HE COULD HELP ME BUILD THE BRANCH"

He told his employees exactly what the trouble was with agriculture and trade, and why the road was short of money. He advised the farmers and planters to try a diversification of crops, and not to rely altogether on cotton. He issued a statement to the public generally, in which he pointed out that a pinch existed, and that the road had to cut its force and reduce wages; but he said that he would arrange matters so that no units would be entirely shut down, and no large number of men and women thrown out of employment at any one time. He pointed out that the condition was temporary, and that the Central of Georgia looked to a rosy future. He stated the hard facts and interpreted them in terms of common sense and humanity. He put heart into the whole region.

Mr. Pelley says that he did not like to leave the Central of Georgia and the Illinois Central system, with which he had served so long, but he recognized that a big job awaited him up North with the New Haven. His situation is a little peculiar now. When he was in the South, heading a Southern railroad, he was interested in seeing cotton mills shift from New England to the South. Now that he is up North and heading a New England road, he is interested in keeping textile mills in the New Haven's territory.

"As president of the Central," he said, "I was interested in the southward shift of textiles. It brought good business with it, and I was glad to see it come. Now things are different, and I am on the other side of the fence. The South has got a fine start, and can look after herself. I am greatly interested in seeing the textile industry of New England get back on its feet, recoup its losses, and get going again. What is more, I think it can and will. The people in New England are on the right track. They need modern machinery and the most up-to-date facilities. The New Haven can help by giving the best possible service. If more is needed than the road is giving now, it will be furnished."

In the course of the interview he excused himself many times to speak to officials of the road or to one or another of his secretaries, and always with the same natural, friendly manner to his subordinates that he employs with visitors from the outside. This democracy of his has already produced several amusing situations. He tells about the time he went to a meeting of the New Haven Railroad Veterans' Association. Nobody knew him, of course. John H. Keeler, president of the association, had written a letter expressing the hope that the new head of the road could find time to attend the meeting. It would be an inspiration to the older men. At 2 P.M. on the day of the meeting a well dressed, well set-up stranger entered the rooms of the association in the Railroad Y. M. C. A. building. A spruce, snappy clerk wanted to know who he was, and whom he wanted to see.

"My name is Pelley," said the stranger smilingly.

"Well, well, is that so?" returned the clerk airily

He was just about to add something about his own identity as Napoleon Bonaparte when he had a second thought. Maybe it really was the big chief, after all. He remodeled his grin, put a little more respect into his manner, and eased through the nearest doorway to get some inside information.

The big chief laughed when he told Keeler about it. He doesn't hold grudges for such things as that.

The new president of the New Haven believes that the public is entitled to the fullest information about the affairs of a railroad system. He always talks frankly to newspaper men.

"It is my idea," he says, "that the public is fair-minded when correctly informed, and that the obligation rests upon us to furnish accurate information as a basis for clear thinking about transportation matters. I believe that frank discussion of railroad operations and problems has created in the public mind a much kindlier feeling for the railroads, and a better understanding of what they are up against, than existed in the past."

Frequently he talks about railroading before groups of one kind or another. He likes to explain to women what a railroad means to its territory.

The Housekeeping Idea

"As a big business," he says, "a railroad must be run along business lines. Women who are the heads of households know how important it is to keep on hand, ready for use, fuel, ice, food, and such other supplies as you need to run a house properly. A railroad must keep house, too, with ample supplies of coal, rails, ties, repair parts, tools, and many other necessaries stored away at some centrally located point, in order that they may be available on immediate requisition.

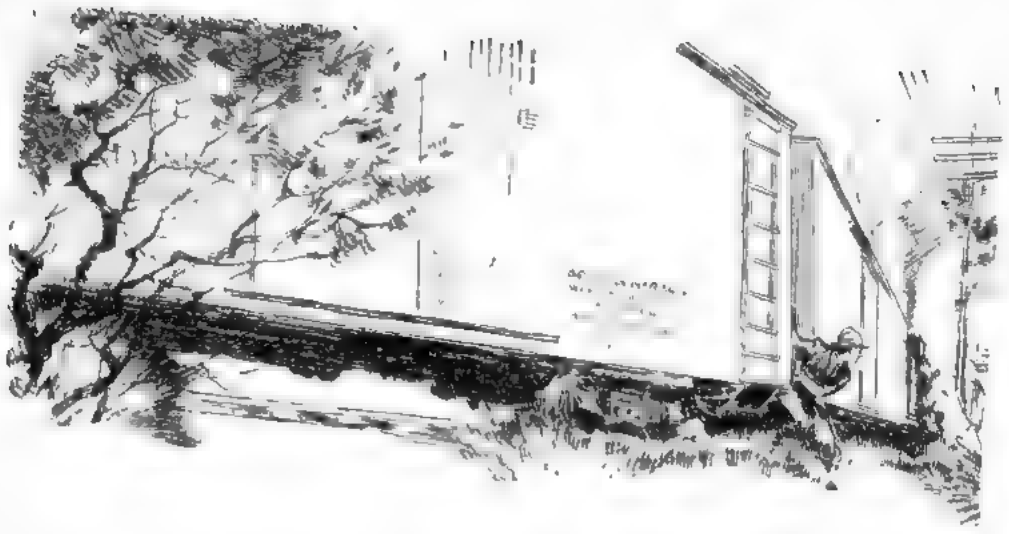
"Any one can appreciate the magnitude of railroad housekeeping when I tell you that the modern locomotive contains more than forty-two hundred parts, not including nuts and bolts. Any of these parts is apt to become defective and need instant replacement. A modern all-steel passenger coach has more than two thousand parts, excluding bolts, nuts, rivets, and such things. A refrigerator car has fifteen hundred parts, an ordinary box car five hundred. We cannot wait to order replacement parts from the manufacturers. We have to have them on hand, ready for quick use."

Mr. Pelley succeeded the late E. J. Pearson last February as president of the New Haven. In twenty-nine years he had risen from a job which paid him thirty-five dollars a month to one that probably pays him seventy-five thousand a year. Perhaps in the course of this article the reader will find out how he did it. His family consists of Mrs. Pelley and their fourteen-year-old daughter, Mary Jane.

Jack McCartney, who has been assistant to the president in the front office of the New Haven for three generations of chief executives, sizes up the new chief in his own way.

"He's a regular guy," says Mr. McCartney. "He's the kind that can go to a wet party without being a dry blanket. People do things for Mr. Pelley because they want to please him. He wins them. He respects and likes everybody, and therefore everybody respects and likes him. He is always poised and good-humored. When things go wrong, he doesn't shout or rave. He has a trick of going off and sitting by himself for a little while. If there's any storm, it all goes on inside him. Then he comes back, and the sun shines again.

"He likes to please people, and it distresses him when he can't do it; but that man can say NO in capital letters. He likes to play and he likes to work. He likes to have work crowd him. He likes to have it come thick and fast, so he can get his teeth into it. So far as the men on the New Haven are concerned, the new boss is all there—and how!"



Blood and Steam

The Death Peril of Feud Follows Joe Allen, Fireman, From the Blue Ridge to the Main Line

By Don Waters

CHAPTER I.

JOE ALLEN, an extra main line fireman, stopped on his way across the yards and looked back toward the station at the long passenger train standing under the umbrella shed Fourteen big steel cars, baggage and mail, express and sleeper, they extended the whole length of the shed. From the ponderous high-wheeled compound locomotive on the head end opposite him to the closed glass-windowed platform of the observation coach, the whole train was painted a deep dark-blue color

The Blue Streak, the crack train of the road, had stopped at the terminal to unload mail and change engines. In a few minutes she would start, sweep down through the yards, pound heavily on the frogs of the crossover at the Glen Cove cut-off, and drive past the interlocking tower at the junction. A superior train by class and direction, everything would go into the siding till she went by, and she would have a clear rail for her fast, hard run.

"The Blue Streak!" Joe Allen muttered. "She's sure pretty, a shimmering in the morning sun. The Blue Streak!" he repeated. "Wonder if I'll ever pull a throttle on a train like her!"

He watched while Jack Eagle, the engineer, finished inspecting around, set his long-spouted oil can up in the gangway, and climbed into the cab after it. A surge of admiration swept over Joe Allen as he saw Jack take his seat, lean out of the window, and look back. Big, genial Jack Eagle, the ranking engineer on the division, was never in too much of a hurry to wave a friendly hand to the train crews who

HE WONDERED WHY SNEED COWSIE WAS RIDING THAT TRAIN

waited for his passing on the sidings, or to answer their highballs with a low *boot, boot,* on 1001's big steamboat chime.

A signal whistle squealed a thin piping *wheet, wheet,* and easily, gently, as if pushed along by some giant hand, the train moved. A puff of white smoke blurted out of her short, stubby stack, her polished side rods slowly raised and lowered, her high-wheeled drivers revolved, and she picked up speed rapidly.

Abstracted, with admiring eyes, Joe Allen stood in the center of the yard, watching the show train of the division get under way. In a few hours she would be rumbling across Grassy Branch trestle, past Glen Cove, past his home.

Suddenly above the noise of the 1001's exhaust, above the rattle of the coal chute elevator behind him, shrill, frantic, high-pitched, a shout arose:

"Stop her, stop her!"

Quickly he turned and looked in the direction from which the shout came. There were three or four engines standing on the pit track, waiting for the fire knockers to clean their grates and ash pans. The night gang had left them for the day force. The last engine on the string was moving away from the others, backing up, accelerating fast.

Joe had driven her on to the pit track just half an hour ago. The shop force had been short of yard engines last night, and had worked the 742 all night. Her fire was dirty and clinkered when he got aboard her in the morning, and Crab McAllister, his engineer, refused to take her out. Crab was now over at the round house, trying to get the shop foreman to give them another engine. He had told Joe to drive the 742 on to the cinder pit track and wait till he came back.

A group of men from the round house were running toward the moving engine, yelling frantically. A man stood under the coal chute, waving his arms in a futile stop signal. The engine was coming toward Joe, gathering speed. He caught a glimpse through her cab as the opening between tank and engine came abreast. There was no one in the cab. She was running wild. He remembered that her throttle was leaking.

A swift glance ahead caused his heart to throb quickly. Up the rails, switch on switch, leading away from the cinder pit, the diamond-shaped yellow targets on the jack switches were all set for diverging tracks—all save the last, the one before the main line, which showed a red board.

The 742, which was now moving backward, had just come off the main line. The switches were still all lined up to send it back that way; and that way would bring it crashing into the Blue Streak. It would split the switch and smash into Jack Eagle's train. There would be a terrible crash-up if that wild engine sidewiped the passenger.

With the speed of a lightning's flare these thoughts swept through Joe Allen's mind. He was not conscious of his action, but even as he pictured the possibilities of such a crash he was running. In long, springing leaps he crossed the tracks. His hat flew off unheeded. With outstretched arms he reached for the front end of the engine, and his right had closed over the grab iron.

He was jerked off his feet and dragged along the ties. He thought his arm would be pulled from his shoulder. Tears sprang into his eyes from the acute pain. He twisted himself, got his other hand racked into a slat on the pilot, and drew himself up, slowly, painfully. His feet caught on the angling wooden beam, and in another moment he was up alongside the boiler front of the engine.

He clawed his way along the running board. A narrow glass panel blocked his path to the cab. With knee and elbow he shoved the glass into a splintered jumble, and dived through the narrow space between boiler and cab side.

Instinctively he reached for the air brake and swiped its handle far to the right; but instead of the jar of the brakes setting in an emergency application, as he expected, nothing happened. *Cut-a-chu, cut-a-chu, cut-a-chee, cut-a-chee,* the exhaust swished out of the stack. He was racing right alongside the Blue Streak.

Grabbing at the throttle, he cast a glance at the air gauge on the boiler head before him. Its hands were down to zero. It came to him that he had shut down the pump when he left the engine, and the air had leaked off.

No time to lose! He clawed at the whistle cord swaying above him. *Boot, boot, boot,* rapid, abrupt, staccato, the whistle blared out. He was just abreast of the mail coach now, picking up speed rapidly. He could almost reach out his hand and touch it. Standing

up on the raised deck of the cab, he looked over the top of the empty coal bunker. Just before him, he saw Jack Eagle's head bob out of the window and then jerk back.

He was even with the back end of the 1001 now. Just fifty feet ahead, the switch target on to the main line showed. There was no chance to stop this engine. To reverse, he would have to shut off, sling the reverse lever, then open up again. The steam would be sluggish to check the momentum. If he did that, the 742 would just slow up enough to sidewipe the passenger coaches.

Suddenly a way to prevent this thing came into his mind—a way to prevent the loss of any life save his own. He would try to hit the Blue Streak's engine ahead of the cab. He would try to save Jack Eagle and the passengers in the coaches behind.

He reached up, caught the throttle in both hands, set his foot against the boiler head, and jerked the lever clear back. He felt the engine surge. No time to unload now!

He closed his eyes. His heart almost stopped beating as he felt the lurch when the tank took the switch. Holding his breath, he waited for the crash, for the roaring impact, the hot blast of steam, the pain-shot moment that would be his last. He would go out, like many another railroader, in a cloud of scalding steam and the roar of ripping steel.

II.

The tense, breathless moment when Joe's nerves were all on edge, expectant, resigned to his fate, passed. The engine he rode jolted hard and slung him against the corner of the cab; but nothing else happened. There was no crash, no terrific impact, no hissing roar of steam. Instead, her exhaust beat out in an increasing tempo, *ca-chee, ca-chu, ca-chee, ca-chu.* Her tank wheels rattled over the rail joints; her trucks clicked steadily.

Joe felt rather foolish and strangely cheated when he opened his eyes. Ahead of him, seen along the tank side, the ends of the ties and the gray rock ballast of the roadbed streaked backward.

Standing up, he passed his hand across his forehead. It came off wet with cold perspiration. Looking over the top of the tank, the twin paths of steel glinted their polished surface in the morning sunlight.

He glanced back the way he had come. The 1001 was standing a hundred yards back up the track. He could see Jack Eagle climbing down from the cab, while along the train, through the opened vestibule doors, a line of heads stuck out.

Then he realized what had occurred. Jack Eagle had given his train the "big hole," swiped the brake valve into emergency, slowed her down, and checked her speed for that fraction of a second in which the 742 had split the switch and leaped on to the main line ahead of the 1001.

Joe reached up, jammed the throttle closed with a trembling hand and slung the reverse lever ahead. When the locomotive came to a stop, he eased the steam open and ran slowly back toward the standing train, which had overrun the switch three car lengths. The reaction from the narrow escape had set in. He felt cold and shivery. In spite of all his efforts, his teeth clicked chattering together.

He stopped his engine. Jack Eagle came running up along between the rails. Hard-eyed, angry, the engineer swung on to the grab irons and flung

himself through the opening between the cab and the tender.

"Say, fellow, what in the hell do you think you're pulling? You—"

Then he stopped abruptly, as his quick glance rested on the air gauge. Jack Eagle needed no second look. His angry manner changed, his face softened

"Well, old dusty, I guess you did the best thing possible." He pulled off his glove and held out his hand to Joe. "She had no air on her, and you couldn't stop her. I'll bet some one catches merry hell over this. If she'd 'a' sidewiped us, there'd be a nice howdy-do As it is, the old man will sure be real peevish when he gets the news."

The shop foreman, breathless from running, clambered into the cab. He wasted no time in talk.

"Get her out of the way! I don't want any delay hung on me," he yelled, grabbing the reverse lever.

Jack grinned.

"Hey, take it easy! You're not going to back it through my train, are you? Wait until I clear the switch."

He slid down the grab irons to the ground and walked back to his engine. A car inspector, who had run up from the shanty near the station, crouched down to look at the switch under the coach wheels, and then motioned Jack back. The 1001 slowly shoved her train back till it cleared the switch.

The shop foreman ran the 742 down to the switch, stopped her and called a couple of track laborers who were approaching, their pinch bars and spike mauls slung over their shoulders.

"Come on, you fellows, hurry! Let's get this switch lined up. We're holding up the Blue Streak!"

Inside of five minutes the buckled tie irons on the switch were straightened out. A crowd of spectators had gathered. Joe Allen got down from the cab, slipped away from their inquisitive questions, and hurried toward the roundhouse.

Hardly had he got back to the shops when a call boy notified him that he was wanted up in the superintendent's office. It was his first experience "on the carpet," and he opened the door of the private headquarters of the division superintendent with a great deal of trepidation

Inside, sitting at the desk, the superintendent looked up and nodded toward a chair.

"Sit down, Allen," he said. "Tell me what you know about the 742 getting away from the pit track."

Joe, nervous and ill at ease, moistened his dry lips and looked around him before answering. His engineer, Crab McAllister, sat with his chair cocked back against the wall, apparently unconcerned. The shop foreman was plainly worried at what Joe might say. The yardmaster came into the room, glanced at the group and sat down.

"How did it happen, colonel?" he asked.

"That's what I'm going to find out," the superintendent replied curtly. He nodded to Joe. "All right, Allen—tell your tale."

Joe stammered and hesitated. His first impulse was to say as little as possible. He realized full well that some one would be disciplined, and felt that he might come in for a share of the blame. He didn't want to put it on any one, nor did he want it put upon himself.

"Was the throttle leaking?" the colonel asked.

The shop foreman glanced quickly at Joe and shook his head slightly. Joe knew that if he told the truth, the shop

force would have to bear some of the blame; but after a glance at the colonel's set, determined expression and hard gray eyes, he also knew that the easiest way out would be to tell the truth. Let the blame fall where it would.

He nodded.

"Yes, sir," he said.

"Who was the last man off her when she was left on the pit track?" was the next question shot at him.

"I was, colonel."

"Why did you bring her back after taking her out to work?"

Crab McAllister interrupted Joe.

"Well, colonel," he said, "her fire was dirty. They had been running her last night on the yards, and she was in bad shape. I was afraid if we worked her to-day we might burn out a set of grates and have an engine failure; so I brought her back from the big dump where we got her this morning."

The colonel nodded as if satisfied.

Joe glanced over at the superintendent's chief clerk, who sat in a corner, taking down notes on a shorthand pad. He saw a gleam of interest come into the man's eyes. Joe studied him curiously.

Although he had seen Upson numbers of times, he had had no direct contact with him, for Joe seldom came up to the offices except occasionally when he checked the timekeepers, who had once or twice made mistakes in figuring his pay.

Instinctively Joe disliked Upson. The chief clerk was perfectly groomed, his hair was slicked and shining, and he was the only man in the room who wore a white standing collar. A diamond stickpin glistened in his neatly knotted tie, and his trousers were sharply creased. He sat with one leg crossed over the other, displaying a silk sock above a low-cut, neatly polished shoe.

He looked up and caught Joe's eyes. A gleam of hostility crossed his face. With a careless gesture he casually held up one hand, surveyed his finger nails, and then spoke.

"Excuse me for interrupting," he said, "but if this engine had been checked, it seems to me she wouldn't have backed off the pit track."

Joe fancied that a smile almost of triumph crossed Upson's face as he made this statement. Crab McAllister stiffened and cast an angry glance at the clerk. On the superintendent's face was an expression hard to fathom. It struck Joe that this was the crux of the whole situation, that they all knew it and had not intended making an issue of it; but now that issue was forced on them.

Like many another investigation Joe had heard of, they probably intended "passing the buck" back and forth, exchanging a few letters between the transportation and mechanical departments, each trying to place the blame on the other, and finally letting the whole thing die out easily, with no one hurt. Joe knew, without feeling at all proud of it, that his action had prevented anything serious from coming of the incident. Moreover, he had been around the railroad long enough to know that none of the officials were hunting trouble, their maxim being "the easiest way out was the best."

The superintendent gave Upson a frown of annoyance and turned to Joe.

"You drove her up on the pit, stopped her, and then what did you do?" he asked.

"Colonel, I shut off the pump, and —and got down."

"And then what?"

"Well, you see, colonel," Joe said

lamely. "I knew it would be some time before we got us another engine out, so I slipped across to the restaurant and got me a cup of coffee. You see, I was in a right smart of a hurry in getting down this morning, and I missed my breakfast. The call boy never rousted me out till about twenty minutes before we were marked up to leave."

The colonel stroked his chin and looked intently at the fireman.

"Allen," he said, "you have pretty well given yourself away. You know it's against the rules to leave the company's property while you're on duty, don't you?"

Joe nodded.

"You knew that throttle was leaking, didn't you?" Without waiting for an answer, the superintendent continued: "Yet you blithely got off the engine, and left her without taking the trouble to throw a chain across the rails under her drivers. You know there are chains at the pit track for that purpose, don't you?"

Joe nodded again. It looked now as if he was to bear the brunt of this.

The superintendent studied him for a long minute before speaking. He drummed on the desk, thinking; then he rendered his judgment.

"Except for the fact that there are extenuating circumstances in this case, I would be forced to discharge you."

Joe's heart fell. He looked up quickly at the next words.

"How long have you been in service?"

"Two years and a month, colonel."

"You are a comparatively new man," the colonel said; "and, although you are in a good measure responsible, yet you did not fail to do all in your power to rectify the mistake you made. Those two things are in your favor. I will give you your choice of taking a thirty-day layoff, or"—Joe saw a thin ghost of a smile playing around the corners of the superintendent's mouth —"or the same length of time on the Slabtown run."

The colonel rose from his seat. Crab McAllister, taking this as a signal that the investigation was over, reached under his chair for his hat and hastily started for the door.

"Wait a minute, McAllister." The superintendent stopped Crab, whose hand was on the knob. "I'm going to give you the same. You ought to know better. You've been on an engine for well over ten years."

The engineer's grin disappeared from his face.

"Why—why ride me, colonel?" he asked belligerently.

"No one's riding you," the superintendent replied. "You're getting off light. You know you're responsible for your engine. You're inclined to be careless. You take your choice—thirty days off, or thirty days on the Slabtown. If you loaf for thirty days, I think I'll have to mark up about ten demerits against your personal record."

Joe looked from Crab McAllister's crestfallen face toward the clerk. Upson was smiling sardonically, apparently well pleased, and Joe wondered why the clerk was getting so much satisfaction from the outcome of the affair.

III.

Out in the hall, Crab spoke to Joe.

"Well, we got our rap," he said. "If I hadn't been in such a hectic rush to razz the shop gang, I'd have fixed the 742 so as she wouldn't have walked out o' church on us that way."

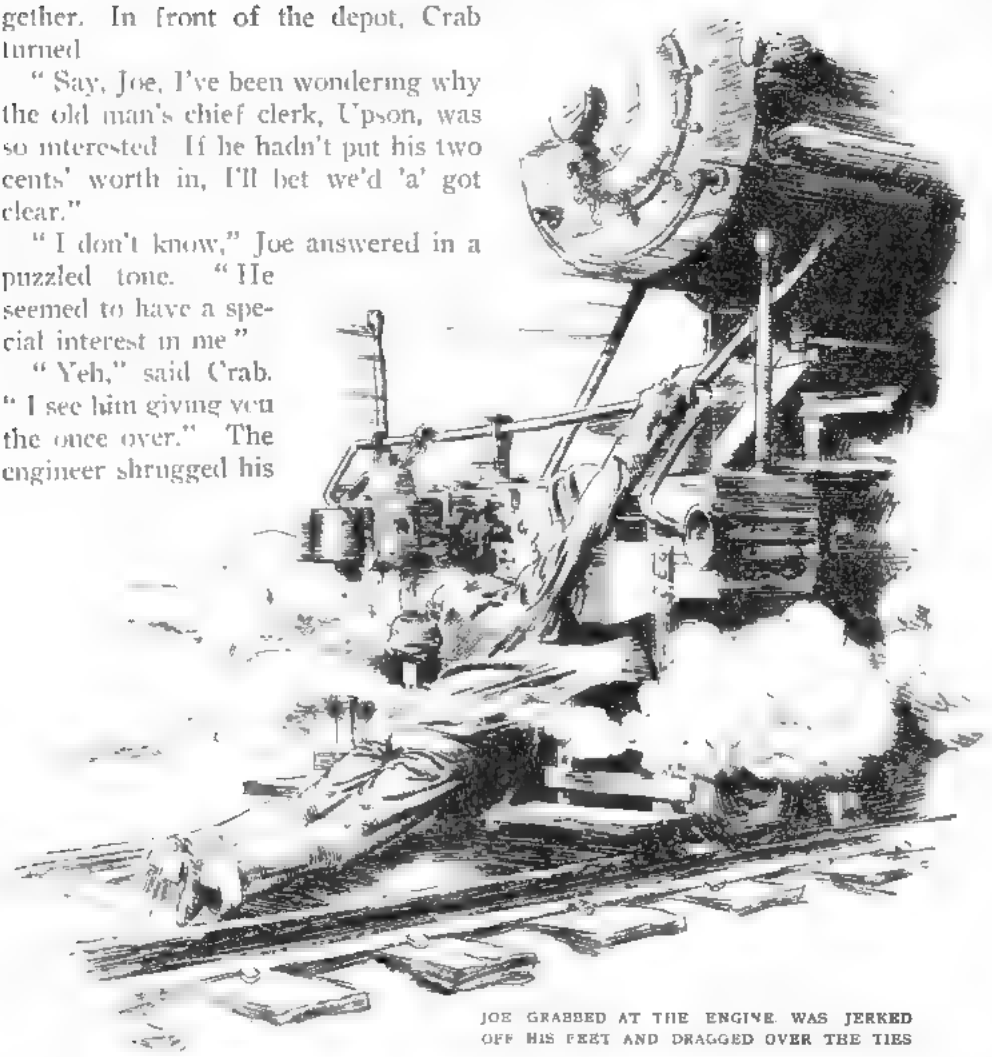
The two went down the stairs to-

gether. In front of the depot, Crab turned

"Say, Joe, I've been wondering why the old man's chief clerk, Upson, was so interested. If he hadn't put his two cents' worth in, I'll bet we'd 'a' got clear."

"I don't know," Joe answered in a puzzled tone. "He seemed to have a special interest in me."

"Yeh," said Crab. "I see him giving you the once over." The engineer shrugged his



JOE GRABBED AT THE ENGINE. WAS JERKED OFF HIS FEET AND DRAGGED OVER THE TIES

shoulders. "Well, such things will happen," he added philosophically. "I'm going to give the call boys a ring and tell 'em how we stand. You going to mark up on the Slabtown, Joe, or to work the poolroom turnaround for the next thirty days?"

Joe laughed

"Oh, I'm no cue artist, Crab. I'll go out on the run."

While Crab was in the station telephoning the call office, Joe stood out in front, thinking over the investigation just finished. The Slabtown local, on the so-called Wooden Axle division! He smiled to himself as he thought of it—a jerkwater branch which led off the Glen Cove cut-off a quarter of a mile from his home.

He knew it well, although he had never been on that run. It ran along Grassy Branch bottoms up to the lumber mill at Slabtown, twenty miles above. Late each evening, a little hundred-class engine wheezed off the heavy steel at the Glen Cove water tank

to haul its string of half a dozen empty box cars over the lighter rails. The train crew were supposed to spend the night at the lumber camp at the end of the run, and to return in the morning with their load of dressed lumber.

Joe knew this schedule had been arranged on account of the unimportance of the run. By dispatching them out in the evening and returning them in the morning, the Slabtown local fitted into the time card without interfering with the movement of other more important trains. No one wanted that run. It was considered the most undesirable on the line. Only train crews being disciplined for infractions of the rules ever went on the Slabtown run. He had heard of several who, having a choice of a thirty days' layoff or the same time on the Wooden Axle, took the layoff.

Crab McAllister's voice interrupted his thoughts.

"Well, Allen, we got a couple of days to loaf. I just got the dope from the call boy. The gang out on that run don't mark off till the first of the month. I'm going to dig me some worms and go fishing. Want to come along?" he asked.

Joe shook his head.

"No, Crab, I think I'll run home for a couple of days and see how my folks are faring." He whistled. "Whew! I just recalled, I've been so busy I haven't been out there for six months." He waved his hand. "See you later, Crab"

Joe went to his room at the Railroad Y. M. C. A. to pack his suitcase for a trip home. That evening he rode out to Glen Cove on a freight, got off at the water tank, and walked up the tracks a quarter of a mile. He climbed over the rail fence, went up the hill, and saw the log cabin in which he had been born nestling under the shadow of a big chestnut tree in the cove below.

The hand-rived white oak shingles were weathered a deep, rich gray and spotted with green patches of lichen. The big stone chimney, half covered with ivy, its top smoke-blackened, seemed to have grown naturally out of the rough split logs that formed the end of the cabin. The whole home had an air of permanency. It blended naturally into the scenery around it.

To Joe, however, it looked small and insignificant to be the home of a family. It seemed to have shrunken since he had last seen it. He was now deeply immersed in another world, a world of ponderous machinery, of steel and steam, which was alien to the crude and primitive life that he had lived before he went railroading.

Since then the soft, boyish expression had vanished from his face. There were little wrinkles around the corners of his eyes that told of many a day and night of work and worry, of fighting a fire with poor coal, of keeping steam up on a poor steaming engine, of hauling a heavy drag. The remembrance came over him of several times when the "Dog Act," the sixteen-hour law, had caught his train far from the end of the run with a dying engine and empty coal bunker that had held fifteen tons of coal when it left the terminal.

In the last two years he had "learned the road"—had learned the whistle and flag signals, the crossovers and sidings, the interlock and block signals. He still had other things to learn, he knew. They were putting in new electric block signals now. These automatic train stops had already been installed on some divisions; they would be on this division next.

Since he had been on the road, changes had taken place. They had cut out some of the old sharp curves and put in easier ones. At several places on the main line they had dumped thousands of yards of dirt and rock into dips between two hills and made a level fill. They had cut the schedules and reduced the running time on each new time card. The firemen felt these cuts more than any of the train crews, for the firemen did the work.

Joe sat down on a stump, clasped his hands behind his head, and in memory went back over the last two years. It had been difficult, at first, to buck the extra board, to fire on the slow, heavy drags, to sling six, eight, sometimes ten tons of coal, scoop by scoop, into the roaring, ravenous maw of a firebox, to rock the shaker bar with tired muscles and limber back, to tug and haul at hook and slice bar; but he had gone through it all.

The palms of his hands were rigid with hard, horny calluses. He had polished many a scoop handle with them. The muscles of his back were knotted ridges. His swelling forearms rippled under the skin. The slight stoop of the mountaineer was gone. Joe Allen had become broad and square of shoulder, narrow-hipped, hardened by the toil he had done.

He weighed almost two hundred pounds, with scarce a superfluous ounce of weight on him. He was quick-footed, clear-eyed. His jaw was firm, the cleft in his chin showed plainly. There was an air of earnestness about him, the appearance of a man who would not be content with less than he strove to get.

The two years that had passed had changed him. Joe Allen was a man grown, sure of himself. He was an experienced fireman. He knew the intricate mechanism of a locomotive, the injectors, the air brakes, the automatic fire doors, the headlight system. Flue and crown sheets, nozzle and arch, were no longer mere names to him. They were intimate parts of the machines he rode.

His "age" was accumulating. He now had a little choice in the runs he took. To the newer men on the board fell the heavy drags. He had gone so far on the road of advancement. All that those two years had taught him was to one end—to drive a locomotive, to be an engineer.

A heavy doubt swept over him. He wondered if he would succeed. Already he had been up "on the carpet." He was even now being disciplined. There was a black mark against his name—not for a very serious offense, yet for one that he wished he had not committed.

Coming out on the freight, the conductor had told him that he had nothing to worry over, that they all "pulled boners" occasionally.

"The old man handed you a good swift kick, Joe, but he had his hat in his hand when he did it," the trainman had said.

And yet, as Joe picked up his suitcase and started down the hill, he wondered what his people would think when he told them what brought him home.

IV.

At the cabin door Joe's mother looked up. Casually, evincing no surprise at her son's appearance, she said:

"So ye're home again, Joey. We war expectin' ye."

"How come that?" he asked.

"Oh," she explained, "Sneed Cowsie war tellin' down to the store how

ye'd got yoreself into trouble, and had bin run off the public works. Joey, I air glad ye're back. Things hain't gone along very well since ye last war yere. Yore pap don't seem to take much interest in workin'. He's a lettin 'the corn run wild—"

"But, maw," Joe interrupted, "how come Sneed Cowsie knows anything about it?"

"He come back from town this noon. Ye know, Joey, he has a cousin thar at the railroad what has some big, fine job."

"His cousin, who?" Joe quickly asked. "What's his name?"

"He air one of them thar Yaller Hill Upsons," his mother replied. "They air close kin, all o' them, to the Cowsies."

Now Joe understood why the chief clerk had seemed to be interested in his punishment.

"He war tellin' Sneed all about hit," Mrs. Allen continued. "Ye know that war a juicy morsel fur Sneed to come back yere and blab all around."

An angry flush spread over Joe's face.

"Don't ye believe all them lying Cowsies have to say, maw. I've not been run off at all. I'm only marked up for another run on the Slabtown."

His mother looked up quickly.

"Joey, thar'll be trouble fur ye. Thar air more Cowsies at Slabtown. In fact, they run the hull place. Ye'd better jest quit the hull business, Joey. Thar's a livin' fur ye yere; and 'sides, when ye're around, yore pap's not so apt to get into trouble. As fur as I kin see, all ye've got out of the railroad so fur is a lot o' hard work. Sneed Cowsie is gettin' mighty uppish and overbearin' yere o' late. He air got him some money somewhere. He's a drinkin' around and talkin' big. Every wunst in a while he air gone fur a night o' two, and when he comes back he hain't tellin' no one whar he's bin. He's rilin' up yore pap more and more, talkin' big, eggin' pap on to sell this yere place. I bin lookin' fur trouble 'most any time now."

She glanced through the open door and suddenly broke off in the middle of her sentence. Joe looked out of the door. Up the road leading to the cabin his father came riding. The mule galloped hard, the sack of meal behind flapped up and down grotesquely and Calvin Allen, hatless, his face red, his whole manner one of anger, pulled up in front of the cabin, leaped off his mount, and strode through the door.

"Hit's gone fur enough!" he muttered. "I hain't a goin' to let no one run over me thisaways. I aim to stop hit—and right now!"

In two long strides he crossed the room and reached up for the Winchester racked above the fireplace on a couple of deer antlers. His wife grabbed his arm.

"Now, Calvin, don't, don't!" she pleaded. "Thar's bin enough fightin'. Things air quieted down. Don't ye go rilin' 'em up agin!"

Calvin Allen shook off the restraining hand.

"Woman," he shouted, "ye air not in this. Hush yore fuss! This air's a man's job, and I aim to tend to hit."

But she was not to be quieted. In an effort to delay him, she asked:

"What's goin' on, Calvin? What air ye all het up over?"

"Goin' on!" he exclaimed. "Thar's more gone on than I aim to 'low to continue."

He jerked the lever of the rifle. A shell flipped out, rolled across the rough puncheon floor and settled in a crack between the hewn planks.

"That air low-down kern of a runty, that air toad eatin', egg suckin' Sneed Cowsie, he war down at the mill, runnin' off his mouth. He hinted as how I'd be puttin' this yere farm up fur sale now that ye war about to be run off the railroad, Joey, and couldn't be sendin' us money home of a pay day. He turned his venom on me in that nasty way of hisn. He 'lowed as how I was lookin' peaked and poorly. He reckoned as how we-uns warn't eatin' regular, and said our place war too poor to raise enough to feed a brier hog. He war chucklin' in his hellish way that Joey war too shabby to hold his job a railroadin', and he'd done bin run off. His cousin, Upson, so he says, told him. He war askin' me how long afore I war to be starved off'n hit. He done offered to buy me out, said when I got to whar I couldn't make hit no more, he had the money a waitin'. He said he'd give me a thousand dollars fur hit, and shook a big roll of bills in my face. When I scorned his money, he gits nasty and tells me he'll run me off'n the place and git hit fur the taxes."

Calvin stopped for a moment in the doorway. His shoulders drooped.

"An', Joey," he said despondently, "what galls me is he air nigh enough right to hurt. Seems as if I cain't git to goin' on this yere place since ye air not yere to work wi' me. But, good Lord, how I'd hate to think of hit goin' into Sneed Cowsie's hands! Ye know how low-down he air, how he's never done nothin' but moonshinin' and bootleggin'. He's bin on the chain gang fur three months since ye left, makin' roads. Kotched him sellin' liquor."

Calvin clenched his fist and brought it down with a thump on the table, "I ain't a goin' to let no one run over me —least of all Sneed Cowsie!"

He looked toward his son, the expression on his face denoting that he expected the young man to say something. Instead, Joe gazed unspeaking at the table for a long minute. Then he looked up at his father.

"Sneed Cowsie!" he uttered angrily. "Sneed Cowsie is lower down than a snake's belly, and it's trailing on the ground. He's a no-account, trifling likker head. Shooting's too good for him. Yet, pap"—Joe hesitated, then gathered himself—"yet, pap, he says what's partly so. I got into trouble today—nothing much, but the superintendent gave me thirty days on the Slabtown run. Sneed found it out and is making the most of it. You might as well put up your gun, if that's what's souring on you. There's nothing to be made here. Why, pap, Jack Eagle, engineer on the Blue Streak, makes more money between two pay days than you-all do here in a whole twelve months. Instead of getting peeved at Sneed, why don't you dicker with him? Come to town! I can get you a job on the railroad where you can make regular wages."

Unmindful of his father's crestfallen expression, Joe began to unpack his suitcase as if nothing out of the ordinary had happened. Out of the corner of his eye he watched his father hesitating on the doorstep.

A shadow of relief crossed his face a few minutes later, when Calvin Allen put his rifle back into place and went outside, to sit down under the chestnut tree before the cabin. Joe followed and seated himself on a stump. His father took out a twist of homemade tobacco, bit off a piece and munched for a few minutes.

"Joey," he said, "I cain't think of lettin' this farm go to the Cowsies." There was a touch of sadness in the

older man's voice when he continued: "I jest cain't think of hit. This yere farm war cleared by an Allen nigh a couple hundred years ago, the hull three hundred and twenty acres of hit."

He pointed to the hill above the house, where, under the shadow of the spruces, a few tombstones showed.

"Thar lies my pap, and his pap—aye, and their womenfolk too. The folks ye come from, Joey, air all thar on the land that give them a livin'. Hit come down from father to son. Ye air the first o' the Allens to leave hit." His voice was low and tremulous. "Ye air the first to go to the public works to take orders from some one. Ye say ye're being disciplined, as ye call hit."

Calvin stood up and threw back his head in a gesture of defiance.

"To hell wi' that! What's my line comin' to? Discipline! Humbly takin' orders! I'd rather sleep under a bush, chase rabbits fur my meals, and drink branch water, than to let any man be tellin' me what to do and givin' me discipline when I didn't do hit to suit him!" He turned to his son. "Ye and I air the last o' the Allens, all that air left now. Come what might, if I have to sell out, hit'll not be to a Cowsie!"

Joe looked down the valley, purpling in the shadows of evening. He gazed for a long time before he answered:

"Pap, there's more to living than just hanging on to what your fathers left you and nursing a grudge that's over a century old. There's more to living than just eating and sleeping, fighting and drinking. We are behind the times. Out there"—he stretched his arm down toward the gap through which the railroad ran—"out there folks are really doing something. Around here they're groping and messing about, barely making enough to live on; and I'm out with all that. All the drinking and the shooting, the blind, weary work that leads nowhere, poor clothes, soaking wet in the spring, gnat-chawed in summer, shivering chilled in winter—that isn't living."

His voice trailed away. He pointed down to where a long freight train, hauled by two engines, ran through a cut a few miles below.

"There's something, pap!"

His voice was lost, as if he had suddenly perceived a vision that was beyond his comprehension to fathom.

"And, pap, I just can't quit now," he went on, after a moment. "I got to go on."

He squared his shoulders, walked over to the corner of the cabin and grasped a hoe leaning against the wall.

"There's work here to be done," he announced, looking at the weed-grown kitchen garden. "Let's get at it, 'stead of one of us grouching about being run over, and the other pining for something that's a far way off for him."

His mother, who had overheard the last of the conversation from the door, said:

"Ye air right, Joey. Git to floppin' yore hoe, pap! Them thar beans is about kivered up wi' ragweed now; an' ye know how Joey likes beans and fat back."

V.

NEXT morning Calvin was all set to go down to the store at the village, but Joe, knowing that it would probably lead to trouble, dissuaded him

"Pap, the best way I found to forget your troubles is to work them off."

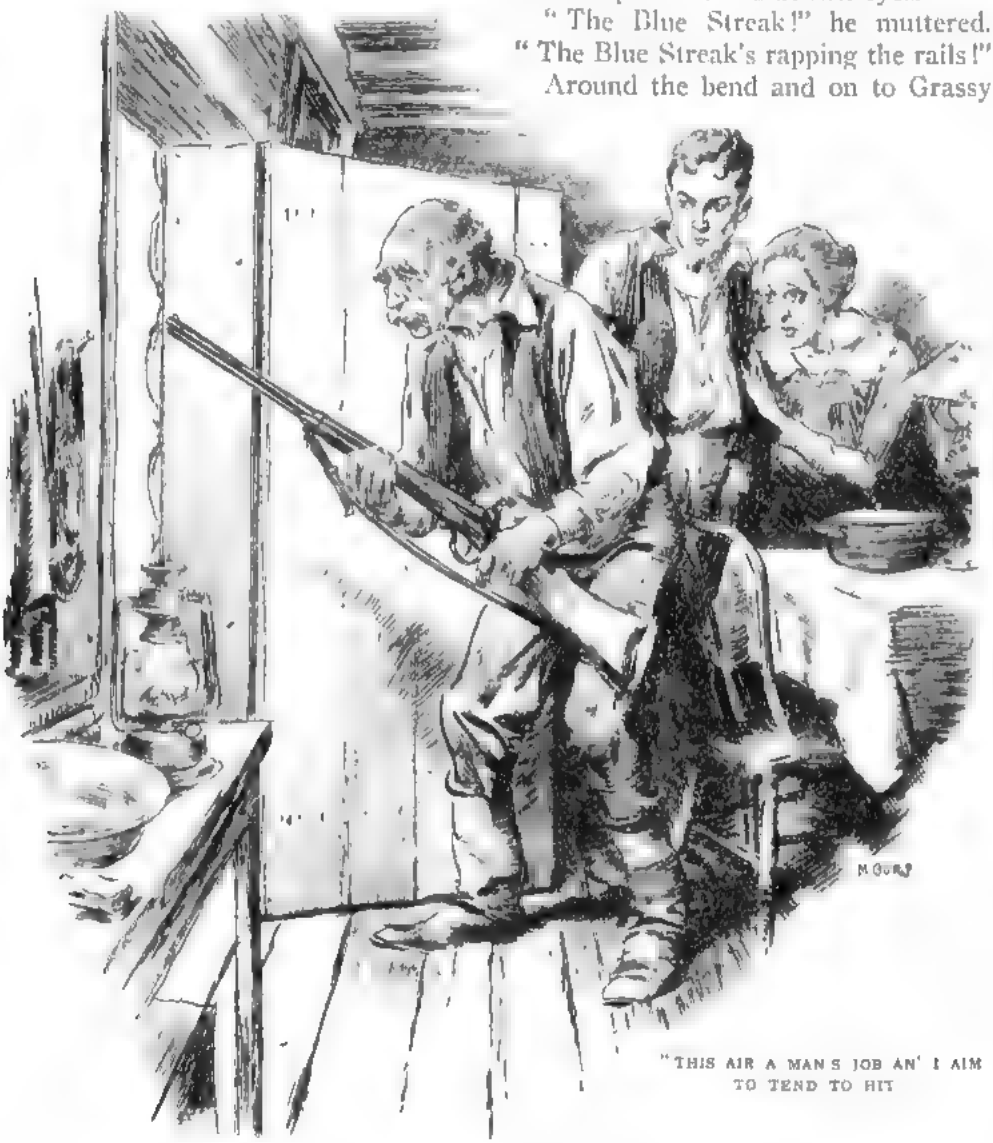
He picked up his hoe and led the way up the hill, his father reluctantly following behind. They started in while the dew was still wet on the corn,

and were halfway down the little patch before the sun was two hours high. Stopping for a moment at the edge of the field to rest, Joe suddenly looked down the railroad as a sound reached his ears. Reverberating heavily over the quiet hills and valleys of Glen Cove settlement, a locomotive whistle blared out a crossing blow, *W'aaa, waaa, wa, waho!*

At the sound Joe Allen pushed back his tattered straw hat, turned and looked down toward Grassy Branch trestle. A far-away, poignant expression deepened in his brown eyes.

"The Blue Streak!" he muttered. "The Blue Streak's rapping the rails!"

Around the bend and on to Grassy Branch trestle a big locomotive swept. Her plunging pistons swung her polished main rods angling in a shuttle-like blur. Her side rods flipped up and down too fast for the eye to follow. There was a flash of nickeled cylinder



"THIS AIR A MAN'S JOB AN' I AIM TO TEND TO HIT

heads, a glint of polished brass. The sun mirrored a dazzling shaft off her headlight reflector.

Got-to-get-on, got-to-get-on, the exhaust rolled its rumbling drum beat out of the short, stubby stack, trailing a gray mist of smoke back over the long train. The *rat-a-tat-tat* of wheels clicking the rail joints grew louder, telegraphed ahead through the steel. Joe gazed admiringly at the long train, led on swiftly by the big, high-wheeled passenger locomotive.

"Gee!" he muttered. "Gee, Jack Eagle's off, but Nat Wells is sure wheeling 'em to-day!"

With a roar the engine plunged by him. At its passing the engineer leaned out of the cab window and waved a gloved hand familiarly to the two men in the field above the tracks. Joe threw his right hand up and brought it down in a long sweeping swing.

"Take 'em for a ride, Nat!" he yelled, his voice lost in the clattering rush as the train drove by.

From out the big whistle on the locomotive, *boot, boot,* the engineer replied to Joe's salute. A couple of baggage cars, three mail, half a dozen Pullmans, the diner, with its tables set and a swift sun glint off shining silver and cut glass, then a glimpse of a dozen passengers sitting in their big leather chairs on the inclosed platform in the rear, and the crack passenger train slid by at a sixty-mile clip. With a rush and a roar the Blue Streak was gone around a curve ahead.

A little cloud of dust swirled up. A milling whirlwind of dried leaves rose, tumbled crazily for a few moments, then settled down. The *click, click* of the rail joints grew less and finally quieted. Two minutes later the sound of the whistle rumbling out a crossing blow drifted back, wind-borne. Joe Allen pushed his hat down on his head and reluctantly grasped his hoe.

Calvin Allen, standing beside his son, bit off a chew of twist, munched for a couple of minutes, and then remarked:

"Joey, I reckon as how I needn't be beggin' ye to stay to home. I seed the look on yore face as that train run past, and I reckon as how the railroad has got ye fur good."

"I reckon so," Joe replied soberly. "For good or for bad, 'cording as how I make it; and it's not going to be easy for me. Upson has shown his hand. He's going to make me live hard. I've done nothing to him, and yet he bears the Cowsie grudge toward an Allen; but"—Joe straightened his shoulders, his brown eyes snapped, his expression hardened—"he's started it and I'll finish it. He may do me dirt, yet I'll make it in spite of him. Pap, you be careful out here. I'm thinking Sneed has a special reason for riling you up. I can't just figure him out; but don't you give him any slack. Stay clear of him. He's up to devilment now, as he always is. There'll come a time when he'll go too far, and, like all crafty folk, his own craft will prove the gin that traps him. Same way, I expect, with Upson. I've got to go back and get to my job, and neither Cowsies nor Upsons are going to stop me from going on with it!"

Joe swung his hoe energetically, attacking the weeds growing rank between the corn rows. His father followed his example, and the two men went across the field, the *chop, chop* of their hoes being the only sound that broke the quiet of the morning. His two sisters came up and took their places alongside the men, after the custom of mountain women.

By nightfall the job was done, and

Joe slept soundly, awakening early next morning before the rest of the family was astir. He dressed quietly, slipped from the house and went down to the water tank to await an inbound freight.

As the pump shanty was closed, he seated himself on his suitcase to watch the first rosy streaks of dawn sweep the gray of night from the eastern sky. He watched the day unfold, saw a cloud bank change color and the red disk of the sun climb above the hills to the eastward, flooding their tops with light, while the valleys were laced with gray wisps of mist rising from the creeks below. He watched a mocking bird on the railroad fence opposite him as it greeted the morning with burst after burst of liquid, limpid song.

It was a lovely scene that stretched out before him—the dark green of the woods, the slowly rising sun dissipating the mist, the far hills etched in patches of light and shadow that marked the little clearings on their sides; and yet Joe Allen was not interested in the beauties of nature. Rather he looked up the track, watching for a train, anxious to get back to the terminal. He scarcely heard the mocking bird; he was listening for another sound—the shrill of a locomotive's whistle.

His face fell when he heard a train blow down the hill. A freight was coming from town, and he knew that he would have to wait for some time till it met the inbound freight at the passing tracks at Glen Cove station, half a mile above him.

Nearer and nearer the train came. He could plainly hear the blended chorus of the sounds of her approach. As she swept across the trestle below him, the swishing exhaust from her stack died and the squeal of the brakes clamping on the wheels of the long freight followed. She was going to stop at the water tank.

Slower and slower the train ran. Just before she came to a stop Joe's expression changed to one of quick interest. A dozen car lengths back a head stuck out from between two box cars. A man appeared, his foot was on the step, he swung himself off the train, cast a look around, as if to see whether any one had noticed him, and then hurried with rapid steps into the woods beside the right of way. Joe recognized him. It was Sneed Cowsie.

He wondered why Sneed was riding on that train. He wondered if the fellow had been into town, and why he was coming back so early. Just a couple of days ago Sneed had been at the terminal. What business carried him in so often? That suspicious manner, the hasty sprint for the woods—what did they signify?

The locomotive came to a stop below the tank. The fireman climbed over the coal, pulled the spout down, and jerked the valve rope. A tumbling, rushing cascade of water poured into the engine's tank.

Joe started to climb up on the engine to talk to the engineer, but his mind was filled with what he had just seen, and he decided not to. In a few minutes the tank lid slammed closed with a bang, the fireman climbed down over the coal boards, and the freight continued on her way.

Fifteen minutes later the inbound freight stopped, and, while the engine took on water, Joe walked back to the caboose and climbed aboard. He knew most of the conductors on the division. As an extra fireman he had been on runs with almost all of them.

The conductor stuck his head down from the cupola.

"What are you doing out here this early in the morning, Allen?" he asked. "Come on up here. I want to chew the fat with you."

When Joe climbed up on the other side of the cupola, the conductor grinned.

"Say, I hear Crab and yourself got thirty days on the Wooden Axle. I sure would like to hear Crab yodeling now! You know, that guy can go up in the air like a skyrocket over nothing. When something like this happens to him I bet he can sing two verses at the same time."

Joe shook his head.

"No, Crab didn't raise much of a stew. I reckon the colonel took him so much by surprise—he never had a chance to get started before it was all over."

"Wait till I see that bozo," the conductor continued. "I'll bet I get his goat!"

He slid the window beside him open, looked out as the train started, and waved his hand. Then he leaned back, the grin faded from his face.

"Some news just came over the wire as I left this morning," he said. "They had a hot time down in the yards last night. You know, there's been quite a bit of pilfering going on."

Joe nodded. For three months he had been hearing reports of box cars being broken into.

"What happened last night?" he asked.

"Oh, they pulled a good one along about midnight. A car of merchandise—hardware, I think it was—was discovered about half emptied. They'd pulled up alongside the yard with a truck and loaded the stuff into it. Those fellows sure are onto the game. They never bust open a car unless it's got something in it that's worthwhile. They'll be caught in time; they can't get away with stuff like that forever, although they've been pretty lucky so far. The special agent and his bunch laid for them to come back, but some one must have tipped them off, for they never showed up again. I tell you," the conductor went on, "it's getting serious. Why, just a couple of weeks ago they looted a car loaded with shoes, and I mean looted it. They cleaned out every case in it. The guys that are pulling this stuff must be on the inside, for they seem to know all the time where the special agents are, and they do their dirt some place else. Well"—he shrugged his shoulders—"it's no skin off of my back. Nobody ain't stole nothing off of me; but I've got troubles of my own."

He reached over for a sheaf of way bills.

"I got to check this stuff for this train," he said. "The bone-headed yardmaster at the other end was all balled up this morning."

Joe leaned back in the little cupola on top of the caboose and looked out through the window at the right of way slipping past. The train clattered along at a good pace; the caboose snapped around the curves, jerked and bumped. Every movement of the train was accentuated on this, the last car. It was quite different from the motion of a locomotive. No wonder the conductors were always growling about the rough way the engineers had of handling their trains, Joe thought, as he picked up a dog-eared copy of the company magazine lying on a cushion beside him.

VI

The train pulled into the yards and slowed down, and Joe unloaded opposite the coal chute.

"Hey, fellow, stop!" a hard voice called as he flipped off the caboose and ran a few steps to check his momentum gradually.

Standing a few feet away, a big man was surveying him coldly. Joe noticed the man's right hand suspiciously swung back toward his hip pocket.

"What you doing on that freight?" he asked.

Joe's first impulse was to tell the inquirer that it was none of his business; but at the other man's next words he checked himself

"I got you under suspicion, young man," the stranger went on. "If you're all right, let me know. If not—"

There was a threat in the unfinished sentence. Joe immediately recognized the big man's interest was not idle curiosity. There was something behind it. So, without wasting any time, he gave an account of himself.

The stranger's tense, suspicious manner changed.

"Joe Allen, fireman, eh, with Crab McAllister? Going out on the Slabtown run to-night? All right, Allen! Sorry I stopped you, but there's a reason for it." He held out his hand. "No hard feelings."

Joe grinned back, taking the proffered hand.

"I'm Belnap, special agent here," the big man continued. "I suppose you've heard that there's been a lot of stealing going on lately?"

Joe nodded.

"So I've heard the gossip," he replied.

The special agent dropped Joe's hand.

"Well, so long."

He started away, but stopped. Gazing shrewdly at Joe for a moment, he spoke again

"You look honest, Allen," he said. "I'm going to trust you. You're going out on the Slabtown. I have an idea that you might be of use out there. You might—" He checked himself. "Well, at any rate, if you see anything suspicious while you're out on your run, call me at once. No matter if it seems trivial to you, let me know; and keep this to yourself. Will you do that for me—for the company, rather?"

Joe nodded noncommittally. He was not interested in the robberies. That was Belnap's job. He smiled ruefully to himself, watching the special agent crossing the yards toward the roundhouse.

"He's got a crust, he has!" he muttered. "Wonder what he'd say to me if he got on an engine I was firing and I handed him my shovel and said, 'Hey, Belnap, stoke for me for a few hours, that's a good fellow!' I bet he'd give me a cold eye then. Wonder what he thinks might turn up on the Slabtown! Nothing's ever happened out there since the first train ran."

He saw the 1001 coming through the yards toward him. A hostler backed her up to her train. Joe passed around in front of the engine and noticed the car inspectors coupling her air and signal hoses. He half stopped in his stride to admire her. She was spotlessly clean, her brass and nickel work glistened, her smooth jacket had been polished till the reflections of the station windows showing on it were almost as definite as the windows themselves.

"Hey, Joe!"

He turned from his admiring survey as his name was called. Jack Eagle was coming toward him.

"Say, Joe, I heard the old man bumped you out on the Slabtown. I'm sorry, but don't worry. I was talking to the colonel last night. He's for you,

all right, and that run might really turn out to be a good thing for you."

"How?" Joe asked.

"Well, you can't spend any money out there," Jack laughed. "It's a regular run. You get your Sundays off, and it's an easy run." A serious expression swept across his face. "It might not be a bad plan for you to mark up regular out there. That will get the job for you. No one can bump you off it, and it certainly will beat first in, first out, bucking the extra board. You make a minimum day every round trip. There's a future ahead of you out there, and a chance for promotion. If you stay on the main line, you're away down on the age list. You'll have to fire till the old heads die off, and"—he laughed again—"engineers live a long time. I'm figuring on living to be a hundred myself, and to beat the schedule on my century birthday. You might put in the next five years before you get a chance to wring the tail on a jack on the main line."

But Joe was not listening to these last words. Abstracted, with admiring eyes, he gazed at a young woman who was coming out of the station toward them. Jack turned and smiled as she stopped beside him.

"Mr. Allen, this is my daughter, June."

She held out her hand. Joe's heart jumped at the contact. Her voice was cool and low when she said:

"I'm pleased to meet you, Mr. Allen."

There was an aloofness in her manner that did not escape him. He realized why. He was just an ordinary fireman down near the bottom of the list; she was the daughter of the division's first engineer.

"Joe, you know," remarked Jack Eagle, "is the fellow I was telling you about. He's the bully boy who raced me to the switch the other morning—raced and beat me to it."

The girl's manner changed. Her limp hand tightened in Joe's grasp. A radiant smile swept across her face.

"Why, Mr. Allen, I'm certainly glad to meet you! That was a brave, fine act. You prevented a smash-up and saved a lot of people from injury." She laid her hand on her father's arm affectionately. "I suppose I'm terribly callous, but it was more to me than all the passengers that you probably saved this old bear from being hurt."

She laughed a musical little ripple.

"You know," she went on confidentially, "he's told me some of the nicest things about you, and I've been so anxious to see you and thank you for what you did for me that morning. I wonder—"

She pursed out her lips in thought. Joe Allen was reminded of a rosebud just opening.

"I wonder why couldn't you come up to the house some time?" she resumed. "Dad and I would like a chance to get better acquainted with you."

Joe nodded, not daring to speak.

"I'm going off for a visit, but I'll be back in a day or two. Promise me you'll come then!"

Joe dumbly nodded again.

She talked for a few minutes, then all three walked back along the train. She mounted the steps of a Pullman, stooped down, kissed her father, and held out her hand to Joe.

"Remember now—when I come back!"

"I couldn't forget, Miss June, if I wanted to," replied Joe, "and I sure don't want to."

He stood beside the train till it

pulled out. While it moved away, he gazed anxiously at each car window. His reward was the flash of a slender hand, the glimpse of a smiling face, the nod of a shapely head.

He started across the tracks to find out what engine was marked up for the Slabtown run. Going toward the roundhouse his mind was strangely awhirl. Suddenly, as if overcome by the thought, he stopped and muttered in a far-away, dreamy tone:

"She's sure pretty!"

A few minutes later, when Joe came out of the roundhouse, he met the superintendent's chief clerk.

"Huh!" grunted Upson, gazing at him superciliously, and started past.

"Huh yourself!" Joe retorted, instantly angry. "What are you grunting at me for?"

"I COULDN'T FORGET, MISS JUNE, IF I WANTED TO," SAID JOE

"A fine-looking hillbilly you are to be standing before the depot talking to June Eagle in front of all those people in the train shed?" sneered Upson.

Joe's fists clenched, his eyes snapped.

"I didn't know you had any say-so about who she speaks with."

"No?" Upson's eyebrows rose. "There's a lot of things you don't know."

"Yes, and a lot I do," Joe exclaimed. "You're not so pernickety as to who you talk to. You even blab all you know to Sneed Cowsie, who is as low-down as men get, and yet at that he's your own first cousin and probably as good as you are—maybe some better."

At this, Upson's face colored in confusion. He snarled an unintelligible reply, then turned and left.

Joe knew, from the black look bestowed on him by the chief clerk that hereafter Upson would lose no chance to injure him. He little cared about that; his concern was over another matter. Was Upson courting June Eagle?

He watched Upson go into the shop office, then he walked slowly across the yards to the Railroad Y.M.C.A., and went to his room. He picked up a book and tried to read, but could not interest himself in it. He leaned back in his chair. Before his eyes a picture formed—June Eagle, soft and alluring, as luscious as a ripe peach with her blue cornflower eyes and her curly golden hair.

June Eagle—he had heard of her before. He remembered that one day old Crab McAllister, who had little respect for anything, mentioned Jack's daughter.

"Some one left the gates of heaven open," Crab said, "and an angel got out."

Joe knew by June's manner that she was interested in him. She had invited him to her father's house. He started to hum an old mountain song gayly to himself:

> "Oh, thirty days is too much—
> Thirty days in jail's too much,
> For you, little Bonnie Blue Eyes!"

Thirty days on the Slabtown, he'd got that, but he'd also had a chance to meet June Eagle. He felt that the score was more than even.

VII

One minute before four o'clock No. 20, the Slabtown local, with engine No. 81, pulled out of the yards. The conductor leaned out of the side door of the converted box car that formed the caboose and swung a green flag in a highball. Ahead of the six box cars of the train the little hundred-class engine jolted over the switch onto the main line.

Joe Allen called across the cab to Crab McAllister:

"Throw it at 'em, Crab! They're all clear."

The engineer set his feet against the boiler head, eased the reverse lever up, and widened out on the throttle. With a clumping of worn rod brasses, a sighing wheeze that told of blowing piston packing, and solid thumps which denoted loose shoes and wedges, the locomotive took hold of her load and flopped out on the main line.

Crab was in no genial humor. When Joe jerked the door chain and drove a couple of scoops of coal into the firebox the engineer looked down at him.

"Of all the damned, low-down, thimble-headed, sway-backed, knock-kneed, spavined sons of—"

"Eh, Crab, take some slack," Joe laughed. "What you got such a full-grown peeve about to-night?"

The engineer stuck his head out of the window and looked ahead to where a "banjo" target shifted from a caution to a clear signal. He jerked his thumb back over his shoulder.

"That lousy, fish eating bunch of carrion back there in the crummy! That nit-witted, hollow-headed Green

Flag West, who's conductoring this outfit, he has the crust to try and give me a razz. Just keep your ears open and listen to me get him told! Know how he got on this job?"

Joe, who was wiping off the water-glass with a piece of waste, not paying much attention to Crab, shook his head.

"Well, I got it from old High Pocket Smith down at the yard office, just before we hooked on. Seems like Green Flag was out on the work train. They set the shanty off on the main line while they made a switch. Green Flag gets into an argument with the operator in the telegraph shanty. While he's talking to him, the brakes leak off of his crummy. It slides down the hill, jumps the track on a fill, and disappears. When Green Flag comes out there isn't a sign of it to be seen; so the nit-wit fans it back into the telegraph shanty and sends a wire along the road to ask if any one has seen his shanty car. Course the dispatcher gets it on this end, and sends Green Flag a message back, telling him to bring back the company's shanty car or they'll have him arrested. Green Flag is right in a knot hole."

Crab threw back his head and laughed.

"I've heard of lots of things missing around here, but that's the first time a whole shanty car gets mislaid. The work train comes in that night bobtailed. The colonel asks Green Flag what he did with that brand-new shanty he let him have in the morning. Course he's got no come-back, and the colonel gives him a month out here to see if he can think it over and remember where it is. It was a couple of days later before a track walker discovered it down in the gully. It had cat-hopped a hundred and fifty yards clear off the right of way without leaving a trace. The only way the track walker happened to find it was that some kids had located it, had strung all the torpedoes along the rails, and were having a jamboree with the fusees; and, with the keen perception that all track walkers have, he suspected they must have got them some place."

Crab jerked his thumb back.

"And here I am with a thing like that waving me on! I got to figure some way to beat this game and get out of it, or before a month is out I'm liable to be going cuckoo and taking a bite at my own ear. What you figuring on, Joe, to get out of this?"

"Nothing, Crab," Joe answered. "I don't mind this run. It's not a hard job at all. In fact, I think I'll rather like it." Recalling Jack Eagle's advice, he added: "I might even mark up regular out here."

The engineer bit off a chew of tobacco and spat disdainfully out the window.

"Say, you're a bigger chump than I thought!" Then a gleam of interest came into his eyes. "Oh, oh, I see a light! Which one, Joe? Which one is it?"

Joe looked up in surprise. The engineer grinned and winked.

"They're not half hard to look at," he went on. "The youngest, Mary Lee, is sure all there. Dress her up in some store clothes, and put a pair of high-heeled shoes on her feet, and she'd stack up against any of the town janes. She'd be a stunner, that girl. If I was about twenty years younger, and hadn't made other arrangements, you might even see me sacheting down Main Street some Saturday night with her wing tucked under my flipper."

"What are you talking about?"

"Aw, come on, you can't pull that

stuff on me!" cried the engineer. "I was young myself once. Those two Cowsie girls, which you got your eye on?"

Joe's expression changed at the mention of the name. He did not know which particular Cowsie girls Crab was talking about. There were scores of them in the mountains around Glen Cove.

As the engine jolted over the right of way he tended the fire, watched the water level in the glass, swept the deck clean, and did the things that make a fireman's job. An hour passed. They went into a siding on the cut-off and waited a few minutes till No. 93, a fast freight, roared past.

Crab glanced at his watch.

"Ninety-three's early to-night." He breathed a deep sigh. "That's a sweet run, Joe, that one! I had her once—one hundred and forty-one miles in five hours, you make your day. The trainmaster don't care how fast you light out with that string, 'cause almost every night she's got a bunch of rush stuff on her. She's a red-baller, and she sure whips the steel into town!"

When the caboose went by, Crab swore frequently.

"Look at that bunch of grinning hyenas! They think they're clever dogs. They ought to be on the vodvil stage. Get to hell a hopping!" he yelled after the fast-running caboose.

Joe could not help smiling. The conductor, the brakeman, and the flagman stood on the rear platform, each with one hand holding a handkerchief to his eyes, the other extended in a gesture of sympathy.

"They got a surprise a coming to them, that they have," Crab muttered. "Giving us the sad hand! I'll bet they go pop-eyed when they see me ambling up the main street in town to-night."

"To-night?" Joe exclaimed. "How?"

"Oh, I'm no slouch," Crab replied complacently. "I got an ace up my sleeve. Keep mum, and I'll let you in on it, too; but that gang back in the crummy, don't let 'em in on it under any circumstances. Let 'em stay! You see," he went on, "I had this run once before, and I know exactly how to work it."

As the train got under way again, and took the switch on to the Slabtown branch, Joe wondered what the engineer planned. To a young man raised in the mountains, this run seemed not at all undesirable. The drag was light, there was no heavy grade, for the tracks followed Grassy Branch first on one side, then crossed over on a wooden trestle to the other, just a short twenty miles up a rise so gentle that it seemed almost a level track. There was but one grade, and that a very short one, where the tracks dipped around a curve down to the trestle and up on the other side. The momentum gained on the down grade drove the train across Grassy Branch and up the other side almost without working steam.

Joe had little to do—a scoop of coal every few minutes—and the rest of the time he could look out. They were approaching the end of the run. The green, fresh wall of the woods that flanked the right of way thinned out. The signs of lumbering operations became more prevalent. Big piles of butts and laps, jumbled heaps of dead branches and fallen trees, were in evidence on both sides of the track.

Crab stood up, untied the knotted handkerchief from around his neck, and pulled off his jumper and overalls. He primed the injector, filled a bucket of warm water with the wash-down hose, every now and again looking

ahead as No. 81 pounded leisurely along. He dried himself, wrapped up his soap in the towel.

"Get a curve on you, Allen," he said. "Get cleaned up, for just as soon as we stop I'm gone from here. We got away from the terminal early to-day, and I can work my game."

"What?" Joe asked.

"Yep," Crab answered. "I'm a going to light a rag and put this place behind me."

"But how?" Joe inquired.

Crab grinned and winked.

"Oh, I'm all set. You see," he explained, "I got it all figured out. I've pulled it before." He looked at his watch. "It's just seven fifty-eight now. It's only a couple of miles over to Yellow Hill. I can get a jitney there to run back to the cut-off and catch No. 87 into town. She's due in right after ten o'clock. I don't have to pull out of here until eight-thirty to-morrow. I can make it easy. I got my night at home, besides, Allen, I got it on that gang back there. I sure will drowse off contented and sleep peaceful, while they listen to the frogs croaking and the hoot owls hooting. Get a curve on you, Allen! We got to jump, or we'll miss 87."

Joe shook his head.

"No, I can't do it, Crab. Not that I wouldn't like to be in at the terminal, but here's my job. This fire has got to be banked, the engine has to be tended to, and I'm being paid a couple of hours extra wages to do that. It wouldn't be fair to the company if I left here. Something might happen."

The engineer shrugged his shoulders.

"More fool you are, considering the company," he remarked as he sat down on his seat box. "And something happen here!" He laughed scornfully. "Nothing ever happens here."

He jammed the throttle closed and moved the air brake handle into a service application, and No. 20 came to a standstill before the unpainted, open-fronted shed that was the Slabtown station. Hardly had the engine stopped before Crab jumped down and disappeared behind one of the sawmill buildings.

Joe glanced over at the little crowd gathered before the station. A score of men and half a dozen girls stood watching the train come in, or were seated on the piles of lumber lined alongside. His eyes swept over the assemblage.

He started. Just alongside the engine he looked full into a young woman's pair of snapping black eyes. She was half smiling in a friendly manner, the bloom of health pulsing in her cheeks, her red lips parted, her white even teeth gleaming. Tall, full-bosomed, with a strong, lithe body that a shapeless gingham dress served not to conceal, but to accentuate, Joe Allen knew this was Mary Lee Cowsie.

For a few seconds they surveyed each other. Then Joe grinned.

"Howdy, Mary Lee?"

"Howdy, Joe Allen?" she returned.

"How'd you know I was Joe Allen?" he asked.

"How'd ye know I war Mary Lee?" she retorted perkily.

"Oh, I just knew it."

"Well, mebbe so did I," she replied.

The conductor came up into the cab.

"Where's Crab?" he inquired.

When he heard that the engineer had left, Green Flag swore long and earnestly.

"Well, the knobby-headed, cross-eyed, splay-footed, sway-backed son of a gun! Hey!" Green Flag called out to the brakeman. "Crab's red-lighted us. He's given us the good-by."

The brakeman and the flagman came up into the cab. If the engineer had heard their lurid comments on his defection he might have received an insight into his ancestry such as he never would have found in any genealogy. When they had run out of breath, Joe laughed.

"Well, you guys got Crab all figured out to your own satisfaction. He's sure put one over on you—no use bellyaching over that. Let's see how things stack up here."

Half an hour later they returned to the train from their circuit of the houses that formed the lumber camp. The accommodations at Slabtown were meager. They ate supper at the mill cook house. A shanty beside the station, one end used for storage of tools and track materials, the other boarded off with four shelflike bunks against the wall, provided them with sleeping quarters.

A disgusted group, they sat on the spike kegs in the shanty, smoking their pipes gloomily after supper. They had tried to make arrangements for a room, but as the mill was operating full blast every available bed in the settlement was occupied.

Joe, however, did not feel the pessimism of his companions. He sat in a corner, reading one of the books he had brought with him. His mind was ranging far away from the squalor and primitiveness of Slabtown. Once he went out and walked up toward the mill.

He wondered if, by chance, he might see Mary Lee again, but there was no sign of her.

To Be Continued

COMPANY AIDS EMPLOYEE INVENTORS

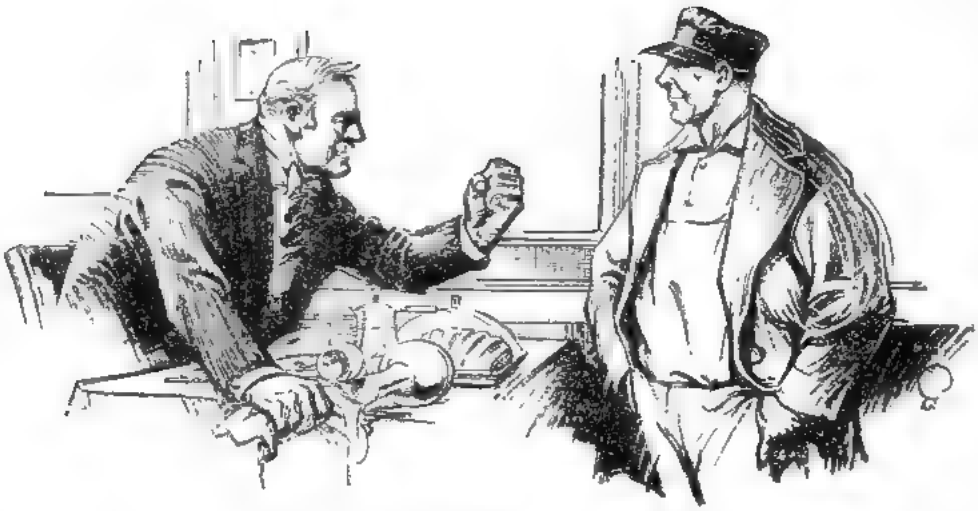
ENCOURAGEMENT to employees who have invented appliances or labor-saving devices that may be adapted to railroad work is offered in the Southern Pacific Company's established practice of obtaining patents free of cost for employees on all practical inventions.

General Manager J. H. Dyer has extended an invitation to employees to make the company acquainted with their ideas and all assistance possible will be given to perfect the device and obtain patents. Obtaining of patents is often an involved and expensive proceeding, and the company can be of great assistance in such matters.

Employees are encouraged to bring their plans to the attention of their supervising officer, together with detailed explanations of the device's uses and advantages. This information, accompanied by duplicate blue prints fully identified and showing the device exactly as it is intended to be used, is submitted to the general manager's office for an opinion as to its practicability and patent relations.

Then, if the device is found to be free of patent infringement features, attorney service will be furnished and patents obtained free for the employee, with the understanding that the Southern Pacific Company and its subsidiaries be granted permit to manufacture and use the appliance.

This privilege granted, the company does not prevent the employee from placing his device on the open market. In fact, the use of it on Southern Pacific lines is a high recommendation for the product, and provides the employee with a strong argument in selling his invention to other companies throughout the United States.



"YOU'RE FIRED," THE SUPER YELLED AT O'BRIEN

The Passing of the Boomer

Their Laughter Stilled, These Roaming Sons of the Great Iron Road Sing Their Swan Song

By James W. Earp

THE "boomer" type of railroader is singing his swan song; is almost a thing of the past in the railroad game. Time was when the boomer was as much a necessity as rolling stocks and engines to the newly built lines operating in untried territories. There railroad executives, when they needed men, needed them at once. No time had they to waste in teaching new hands the intricate complexities of how to switch cars and make up trains and run them. Let the older and more solidly established roads do that.

The older and more solidly established roads did do that. Some of the men who began their services on those roads remained there until death or old age overtook them. Others, fired for reasons ranging all the way from booze imbibing to incompetency, departed to seek employment elsewhere with roads that were not so particular as to the morals and habits of their employees. Still others, afflicted with the spirit of wanderlust, left of their own free will to explore the delights of countries far beyond the borders of their respective States.

Of the last mentioned class came the boomer element in the railroad game. They were the pioneers on the railroad frontiers. Some were little better than the hobo, except for the fact that they would work at times when they fancied. Others shifted jobs because sameness palled and their natures craved changes, excitement, travel.

For what cared the boomer about a mere job? There was always a job somewhere for an experienced man. It was no unusual thing for a boomer in the olden days to blow into a division center on Monday, hire out on Tuesday, work Wednesday and Thursday, only to decide on Friday that the way the train master parted his hair was a reflection on manhood, or the job was the bunk, or any one of a thousand other reasons, any one of which would have done credit to the most temperamental of operatic stars, and on Saturday this same boomer would be drawing his pay check, and Sunday would see another train master on some other division making him welcome.

But those palmy days have gone, perhaps to come no more. As early as 1900 the doors began to close against the not to be depended on boomer who came when he felt like it and quit the same way; whose shoulder always carried a chip, and who was never amenable to discipline of any kind. Keen eyed executives with foresight saw only too well that the boomer was too costly a luxury to maintain, that permanence and dependability were worth more in the long run than mere experience—for experience could be gained by actual work, while dependability and character were the result of good breeding and right training.

The "Home Guard" Enters

THE always independent boomer chuckled loudly in his sleeve when the extra boards began to fill with clear-eyed youngsters, sons of railroad men, or else sons of friends of railroad men in some capacity or other. That these clear eyed youngsters were the handwriting on the walls of time for the boomer never entered their heads. Like all other warnings it went unheeded.

"Home Guards," was the way the boomer designated the younger railroaders. "They won't last long. What do they know about the railroad game? They'll be gone in a short time."

The boomers were mistaken as to that. Just as other prophets have been mistaken.

As the number of these guards grew, so did the jobs about the country grow more scarce. Soon only the desert divisions held forth a welcome for the boomer. In time even these last resorts were to be closed to the nomad with the ever itching feet.

By 1910 the handwriting was too noticeable to be passed by lightly. The wiser heads among the roaming rails made haste to annex themselves to jobs, to have and to hold until death or accident did them part. Not a few have been mentioned in the home town papers with the footnote: "He was one of our oldest inhabitants."

In the olden days a sheaf of service letters delighted the eye of the hiring executive. Not so to-day. Too many changes of occupation spells incompetency or lack of dependability. Your modern executive picks and chooses for character and reliability. Quite different from those golden days when the boomer was in his heyday, and when harassed train masters wired labor agencies as follows:

"Send us anything that looks like a brakeman, looks like he wants to be a brakeman, looks like he thinks he could be a brakeman. Ditto firemen, switchmen and rush same at once."

And the ever active labor agency would comb the saloons and the pool halls and the dives and gather together a collection of men who feared neither God, the train master nor the devil himself. These men were given passes and put aboard an outgoing train, the

labor agency trusting to luck and the railroad company whether any of the men ever reached the destination or not.

Those were the palmy days for the boomer. They have gone, perhaps to come no more. Even the desert divisions have full rosters of experienced men, and only occasionally during the heaviest of fruit rushes from California or the movement of cattle from the Southwest are they in need of extra men. But once this rush is over the boomer is "at liberty" to boom.

Once upon a time there was a saying current throughout the railroad world of boomers that "There was always a job at R——," mentioning a division on the Wyoming wastes. There was, but there isn't any more. What has happened there has happened almost everywhere. The once despised home guard, the boy who took the job and got married and bought a home, and took promotion, is the boy who is in the saddle now. The war, with its increase of wages, is partly responsible for this change. Before the war a clerk or a waiter made more money than the average brakeman or switchman, while the bartender could retire in a period of from one to three years.

Railroad men came to R——, but they did not stay. The wages were standard, two dollars and seventy-eight cents for ten hours work, or its equivalent, one hundred miles. Usually the workers put in sixteen hours a day, for only in that way could they hope to hold their own. Board and room were from thirty-five to forty-five dollars a month, against eighteen and twenty elsewhere at that time. (1909-1910.) Beer was ten cents a glass, whisky was twenty-five, shaves were a quarter, and haircuts were fifty cents. Other things were in proportion. A brakeman in Denver at eighty dollars a month was better off financially than a brakeman at R—— with a hundred and fifty dollars a month.

Amusements were practically nil in the town, unless you counted the gambling houses, the pool rooms, the saloons, and the "houses across the tracks." The water, too, was bad, what little there was of it. Returning boomers declared the water was ninety per cent alkali and ten per cent plaster of Paris.

"A land of sands and simpletons," was the way a nomadic wit once described this particular division. "Nothing there unless you like sand and fleas and rats and bad grub."

Those Days at "Pocaloo"

TRUE, the sand was always there, but the simpletons were not. They flowed into the town in small streams, stayed long enough to acquire a stake, indigestion, an aversion for rats and fleas, and then they too flowed out again. A few brave souls stayed as long as the weather permitted the wearing of summer garments. That privilege denied them, they drew their pay checks and abandoned the desert division to hardier and less particular boomers and the occasional home guard.

In those days Pocatello, Idaho, was a typical boomer job. Few switchmen ever worked at Pocatello without later referring to it in reminiscences as "The time I was night yard master at Pocatello." If statistics are made by talkers, Pocatello averaged about eight yard masters a night, since it first became a division point for a railroad.

No historian could ever begin to compile a list of the more famous of the boomers, men whose names in the railroad game were synonymous with adventure and travel and experiences.

They were as the sands of the deserts. Visits to the switch shanties with the old-timers give you the names and exploits of "Hee Haw Mike," so called because of a peculiar affliction of the palate which made him chew his words when conversing; "Farmer Rood," who deserted a paying one-hundred-and-sixty-acre farm to revel in the wanderlust of the shining rails. "Proverb Pete," who misquoted scripture and who held hatred for any one satisfied or contented with a mere railroad job. Jimmy O'Brien, whose philosophy of life was summed up in one phrase when he said to a fellow boomer one day: "Take it from me, kid, a clasp on the back, a funny story, and a smile will buy you more out of life than growls and scowls and a heavy fist."

The boomer was a product of no particular clime. He came from the North, the South, the East and the West. He had been made on the Santa Fe or the Rock Island or the B. and O., or any one of a hundred other railroads, but his chief claim to fame was that he had been fired or had quit from almost all the others at one time or another. The rule book gave but a bare dozen signals for the movement of trains, but the boomer knew a hundred more of his own and others' inventions, and used them, too. Moreover, he taught their uses wherever he stayed his itching feet. To-day those signals are used by railroad men everywhere.

The Birth of Signal Code

NECESSITY may be the mother of invention, but laziness is a close father. Most of the signals, none of which have ever found their way into rule books, were the result of indolence on the part of the boomer, not to mention a distaste for using his voice except to spin tales and damn the railroads and their officials. Why should he walk over forty cars to tell the student brakeman on the head end to cut the crossing at whatever town they happened to stop at to meet or let trains by? No reason at all! Couldn't he raise his arms above his head in the form of a figure X and make a passing motion with his hands to indicate same? He could. He did.

The same was true when it came to other work, such as station switching and setting out cars and picking them up off the various spurs and transfers. With a list of fifty or sixty cars to switch and move about, there was no hope that any one man could remember all the different moves. Better to let one man handle the switch list and give signals, and the other men on the crew work accordingly. In this way boomer signals came into prominence as business grew heavier, engines grew larger, and trains grew longer. A pat on the head meant to head in on siding or passing track. Fingers of both hands placed to form an inverted "V" indicated "house track." Waving hands with palms open and pointed upward meant picking up this or that.

The "stock track" sign was made by placing a thumb in an ear and wiggling the fingers. If the engineer wished to take water, he made known his need by doubling the fingers of his hand and pointing a thumb toward his mouth. A clasp of the hands meant one car to go out, two clasps two cars and so on

It was the boomer who invented the nicknames for the various branches of the service. Thus the conductor became the "Big Ox," the "Brains" or else just plain "Cap." The engineer was the "Hoghead" the "Eagle-eye," and a host of other names not to be found in the boomer's lexicon when he

made a rough stop at a water tank or a siding or town, a stop which generally resulted in almost wrecking the occupants of the caboose on the rear. A brakeman was a "Shack"; a switchman a "Snake"; a fireman a "Tallowpot" or "Fireboy"; a section foreman a "King snipe," the laborer on the section a "Gandy dancer." The telegrapher was a "Brass pounder" or an "Op." Officials were usually called "Brass collars."

The nature of the train master's position demands that he spend much of his time up and down the road riding trains. And because of this habit the train master had, many a railroader was caught napping at his duties, or, in other words, "trying to slide by with as little labor as possible." To offset such happenings, trainmen and enginemen developed a signal of their own to pass along to crews they met or passed en route if the train master or other official happened to be riding their train. It was a simple little sign made by drawing the fingers significantly across the throat, but it was very effective. No doubt, in the olden days, many a train master and official wondered at the one hundred per cent performance of their employees when they saw them at work on the road.

The boomer had little love for the average official. He acknowledged him as a boss, but snickered behind his back at said official's ignorance of the technic of the operating department. True, the train master knew the book of rules by heart, but when that was said, all was said. Usually the train master was promoted from a clerkship in the big bug's office, or else came up by way of the telegraph operator and into the dispatcher's office and thence into the train master's job, there to stand in line for further advancement. To this day only a few of the officials come from the ranks of the engineers and conductors and switchmen.

The boomer knew his business. He did his work efficiently and well, even though he wasted no extra energy in the doing. "Work your head to save your feet," was his motto, and he lived up to it as a religion. If an occasion arose for the need of a signal, the next time it occurred there was a signal for it. In time these boomer signals were to become hardy perennials in the railroad game.

The Boomer and Marriage

FATHER TIME has ended the career of the vanguard of the boomers. Marriage has eliminated many of the later ones. For with marriage comes the need of a steady job and a permanent one to enable him to take care of "The Queen." Whatever might be said of the boomer railroad man, he is a good husband and provider. And with marriage comes a family to add to his happiness and to deplete his purse. Many a girl who would otherwise have died an old maid in Chicago or Kansas City or Omaha, moved West with the Harvey House and other houses and married railroad men and contributed sturdy, hardy citizens to their country and to its industries. And many a boomer who would have ended his career under the wheels or in a gutter has lived to see his children graduate from colleges with letters after their names.

Many a student receives letters from "dad" at home and revels in the check therein, but sighs as he notices that the pater will never learn that the pronoun I is not spelled with a little letter, and that you suspect and not suspicion, and that he might teach you but he can't learn you.

Yes, the boomer has had his day, and a great day it was. Now and then he flits across the lives of the younger generations, lingers for awhile, and then fades into the dusk of traditions. But his memory lives in the cabooses and switch shanties, mostly because of his story telling proclivities and his disregard for conventions and rules. Of all the boomers of the railroad game, perhaps Boomer Jones is the best known. His exploits are known and told from coast to coast among railroad men. Few, if any, have gained the reputation that is his.

Boomer Jones

JONES was a human duck, whose migratory instincts made life just one railroad job after the other. When spring smiled on the southlands, and the ducks turned northward in their flight, Jones folded up what few personal belongings he might have and made ready to follow after. His summer address was usually in Colorado or Wyoming, where the nights were cool without being cold, and the days warm and pleasant without being hot and sultry.

But when the first chilling blasts of autumn swept down over the sandy desert prairies, or stripped the fast browning leaves from the trees in the foothills and left them bleak and bare, Jones would lift his gaze to the horizon, his eager eyes scanning it for the first glimpse of the quacking, honking tourists on their way to the land of perpetual summer. And once sighted, it was but the work of a few hours for him to tender his resignation, receive his pay check, and like the ducks, migrate Southward.

Jones was a likable fellow, with a more than pleasing personality. His square derby, his huge Knights of Pythias watch fob, and his cheerful grin had been the open sesame to many a job where the boomer element was frowned upon. To hear him tell it, he had been everywhere, had seen everything worth seeing, and was born knowing it all. He could lie faster than the silk special could make up lost time; could bluff Hoyle into quitting on pat fours in a poker game; could blarney an efficiency expert into laughing and get into more trouble in one single trip than the average railroad man gets into in a month, who was all gall and stall and talk—and yet, he had an unexpected way of coming through with a smile and a job just when everybody was predicting he would blow up with a loud explosion.

He never tires of telling about the time he took the air car examination—his first and last, for Jones never stayed long enough on any one job to get on speaking terms with the various instruction cars which are the bane of the railroad man who resents the idea that bookworms can teach them anything about their jobs that they don't already know from actual experience.

He slammed his way into the air car just as the instructor called for attention. Seating himself between a lanky, freckle faced brakeman by the name of Sheehan, and another brother by the name of "Churchbell" Smith, he began a search for the "Makings" he never seemed to have. One look at Sheehan, who puffed a "pill," and his eyes grew bright. Leaning over he whispered:

"Slip me the skins, kid, while I roll myself a dream."

Sheehan obliged with a grin, and Jones rolled himself a dream. During the instruction period he rolled himself many a dream from Sheehan's pouch. But as for the questions and answers,

they were all Greek or worse to Jones. The first two put to him were never even touched by his wild guesses as to what the answers should have been

Yet Jones knew his business. Any conductor or brakeman who had ever worked with him could vouch for that. But the book end of the answers was as far beyond him as the principles of geometry would be to an Igorrote. And as the examination proceeded, and his answers became more and more beyond the point, the instructor's explanations became more and more scathing, and sometimes touchingly personal.

Was the boomer downhearted at all this? He was not. After some half dozen misses he fell back on his own resources of stall, gall and talk. When his turn came to answer a question, the boomer saw to it that something in the answer made by the fellow before him always reminded him of something that had happened some time, somewhere in the dim and musty past, on some mythical railroad division under even more mythical officials. The half subdued chuckles of the men in class began to culminate in roars as even the instructor found his smiles slipping into view despite all he could do to hold them back.

"IF EVER THERE WAS A RECORD FOR SPEED MADE IN THEM HILLS ME AND THE BEAR MADE IT THAT NIGHT"

The usual time allotted to a class was an hour, but this day it dragged into two, and yet Jones lacked not for reminiscences to throw into the breach in place of the required answer to the question put to him. At last the noon whistle blew, and the instructor called time. He collected their names and O. K.'d the slips of those who had passed. One by one the men filed by to receive slips or a notice to return in the afternoon. At the end of the line came Jones, rolling a cigarette with one hand and stowing enough surplus tobacco away for use in case mooching was not as good on the outside as it had been on the inside

"Did I pass?" Jones wanted to know, holding out his hand.

The instructor started to shake his head, then stifled a grin as he reached for the boomer's slip and put his seal on it.

"Much obliged," grinned the boomer.

"Don't mention it," said the instructor. "Know why I'm passing you, Jones? Well, I'll tell you. I'm passing you because it has taken me an hour longer to hold this class than it ever has before. And I don't want you to come back again, for I fear if you do, I'll never get away from this division as long as you sit in a class of mine."

Jones entered the railroad game at sixteen. In those days they had pin pullers who received about one-half the pay of regular switchmen on his particular road. A year of pin pulling and Jones decided to strike out on his own. With him went his buddy and friend, Jimmy O'Brien. They landed in Kansas City with fifty dollars and a valise apiece. Two days of what Kansas City had to offer and they were broke. With poverty came decision to search for a job.

But jobs at that time were few and far between. The panic was not yet over, and money and jobs were equally scarce. Finally a red-faced Irishman by the name of Murphy offered them a job on his section as a gandy dancer. They took it, hoping for a return to better things. Two weeks of driving spikes and shoveling ballast and Jones heard that the Santa Fe in Argentine was hiring switchmen. By dint of good luck and the yard master's amusement at the two strapping youngsters, they landed.

"I'll never forget that first night," Jones would say in relating his adventures. "About midnight we got a load tied on the old billy goat and hit for the Belt Line transfers. What I don't know about this Belt Line would fill a book, but I don't let on. I figure that all I have to do is to keep my mouth shut and my feet working, and I'll pull through with the best of them.

"I don't make no mistake about working my pedal extremities. That Belt Line job was the toughest I'd ever tackled. All night long I'm kept on the jump. When I ain't riding cuts, I'm pulling pins or bending rails.

"By the time daylight appears I'm almost all in. I hop the first calliope that ties into a string of cars and wipes my faded brow."

"'Whew!' says I to the man on the footboard. 'This is sure the hotfootingest job I ever tackled!'

"'Hotfoot?' sneered the man on the footboard as we pull off. 'Then if this is hotfoot you ain't tackled much. Why, kid, this is pickings! The only hotfoot job over here is with the Sante Fe.'

"'Suffering cats!' I whoops. 'Ain't you the Santa Fe?'

"'Hell, no! We're the Missouri Pacific. Now that I get a look at you I seen you ain't our man at all. Guess we lost him, too. He was a new man. They usually do get mixed up when they first come over here.'

"And he was right," Jones would grin. "I had worked for every railroad on the Belt Line that night except the Santa Fe that was paying me. The next morning, when I hit back to Argentine, the yard master allows he'll have to put a bell on me so the foreman can keep track of me until I get hep to the job."

If there was any railroad that had not seen the boomer's name on the pay roll, Jones couldn't recall it. Of course

his stays had not been overly long on each job, but he could claim to have been there—for a while. His reminiscences covered a wide range of latitude and longitude, and never did they tax the credulity of his listeners. Improbable sounding were many of his adventures—so called—but never were they impossible. Always they could have happened, even though they might not have.

"Soapy" Wilson

In this respect he was not like "Soapy" Wilson, a boomer whose weakness lay in the fact that he liked to look upon the wine when it was red, and whose general appearance was one of disreputability. It was Jones who nicknamed him "Soapy." Jones takes solemn oath that he worked four weeks with Soapy, and not once did Soapy take a bath or wash his face or hands. Soapy had covered considerable territory, if you wished to believe his narratives.

But Soapy's narratives lacked coherence and plausibility when it came to expecting people to believe them. Too, they were far fetched and out of bounds for even the most credulous. The four weeks that Jones spent with Soapy were weeks of trials and tribulations and impossible lies that stretched the boomer's patience close to the breaking point many times.

The boomer's prize story had to do with the night they were tied up at a subdivision point. That was the night Soapy's memory played him a mean trick, and gave Jones a chance to revenge himself for having to listen to Soapy. From that night Soapy never offered to spin a yarn if Jones was anywhere in the offing.

The conductor, so the story went, was an old-time boomer himself. And since there were no amusements in the town, he and Soapy pooled cash reserves and invested in a quart of moonshine. Jones never drank anything stronger than beer, so he sought his bunk for a little rest.

But, try as he might, sleep was out of the question while those two liars reminisced of bygone days. Soapy would tell a wildly impossible tale, and the conductor, not to be outdone, would tell one even more impossible. If Soapy said he worked ten years for the Pedro Railway, the conductor matched it with fifteen years of service on the K. and P. If Soapy boasted of twenty years of service for the Santa Fe or Canadian National, the conductor could prove that he had spent thirty with the B. C. R. and N.

More to pass the time away than anything else, Jones began to keep track of their various services, marking down with a piece of chalk on the side of his bunk the number of years each claimed to have had with certain roads. When finally Jones dropped off to sleep, the score on the side of the bunk showed that the conductor had worked a total of some two hundred and fifty years for the different railroads, and the slow moving Soapy a bare one hundred and fifty. But Soapy was beginning to hit his stride and was rapidly gaining on the conductor with every story told.

When the Great War came on Jones enlisted. Far be it from that adventurous nomad to pass up anything like a chance to travel in foreign countries and pick up fresh material. But the war must have cured him of his itching feet, for few train masters could recall having the old boomer hit them for a job as brakeman after the fighting had ceased and the boys had returned to their homes.

Only once has the boomer been heard of. An old-time conductor reported having seen the redoubtable Boomer Jones standing on a street corner in El Reno, Oklahoma, a huge satchel swung over his shoulder, and a three-foot lithograph hanging from the satchel to proclaim to the passer-by the merits and wonders of "*Dr. Jones's Varmint Poison for Prairie Dogs, Gophers, Rats, etc.*" The top of the lithograph held the picture of an animal that is given a wide berth by men and animals because of his offensive odor. The old conductor thought he recognized the animal, but asked for verification.

"Sure it is, matie," Jones admitted. "You see, the old guy that printed this for me had never seen a gopher or a prairie dog, but he knew all about skunks, so I let him put it up there. What's the diff? Most people don't know or won't notice it anyway."

"But the 'doctor' part after your name, Jones? How do you get away with that? Isn't that against the law?"

"Search me, matie. I know professors that never saw a college except from a trapeze or a circus parade, and doctors that couldn't cure a sick dog. What's the reason I can't call myself doctor if I want to. Anyway, what's in a name? What's in a name?"

Jimmy O'Brien

At one time O'Brien was the partner of Boomer Jones. But as the years went by they separated and were lost in trying to see how many railroads they could cover before death overtook them. O'Brien was blue eyed and Irish. His hair was black and his tongue and temper were edged. His railroad record with its days or months of service as disclosed by service papers, made one think of the closing quotations on the board of trade. The reasons assigned for his leaving the various jobs ran the gamut from Rule A to Rule K, along with a lot of other rules not included in the curriculum of the rule book.

"Rules were made to be broken," he was wont to say. "That's why they were made. I know, because I've broken them all and then some."

He was a different type of story teller than Boomer Jones. While the boomer stuck mostly to anecdotes and sketches, O'Brien liked to delve into the finished story itself. The world lost a good fiction writer when O'Brien elected the railroad game instead of the art of spinning humorous yarns.

O'Brien started out in life afflicted with a desire to be a pugilist. By dint of much acquaintance scraping in and about the training quarters of coming pugs, and a decided willingness to work and learn, he soon became one of the participants in the occasional preliminaries that opened up the main bouts. But five knockouts in a row — with O'Brien on the receiving end each time —sent him looking for an easier job than the prize fight game in which to make his fortune.

"If my headwork and fistwork had been half as good as my footwork," he used to say when telling the story of his pugilistic career, "I'd been a champion to-day. In them days I could outrun any pug in the world. They called me 'Speedy' because of it."

In spite of the fact that some of O'Brien's service papers indicated that he had been discharged for violations of Rule G, O'Brien seldom drank, and never while on duty. He always maintained that most of them were accidents, like the one at a certain place on the Santa Fe, when he was holding down a job as switchman for the time being. That was the night when a

breakdown of the switch engine necessitated a brief waiting spell while the machinists made needed repairs. To while away the time a pail of "suds" was rushed to alleviate the thirsts of those on the crew. They were safe in this performance, for the day yard master had gone home, and the night yard master was piloting a passenger train around the WYE. They were deep in reminiscences when the door of the switch shanty flew open and a well-dressed man thrust his head in the door to ask where the yard master was. It was O'Brien who answered.

"The day slave driver has went home and the night hawk is down on the Wye with a passenger train."

"Why aren't you fellows working?" demanded the new arrival, his eyes gleaming angrily at sight of the pail of beer in the middle of the floor. Then to O'Brien: "What's your name?"

"O'Brien, and we're waiting for instructions. Who are you?"

"Oh, I'm only the new train master," said the stranger with biting sarcasm. "My name is Elliot."

"Pleased to meetcha, Mr. Elliot," said the foreman. He turned to O'Brien, who sat closest the pail of suds. "Jimmy, give the new T. M. a drink of the suds."

The next night saw a new crew working in the yards in the place of the old. O'Brien tramped until he struck the Rock Island, then engaged in building their line to Colorado and West. In the train master's office were four other men when O'Brien entered—one engineer, a fireman, a conductor and a brakeman. The train master came out, took one look at them, and called them into his office to look at their service papers.

"So you're off the Santa Fe, eh?" he asked the engineer who stood first out. "What did you get fired for off there?"

"I hit a caboose one night," replied the engineer with a sigh.

It was the engineer's way of explaining a rear end collision with another train. The train master only grunted as he passed him on to the clerk to fill out service application. The conductor came next. He had been discharged for fighting on duty with a telegraph operator.

"What did you get fired for?" demanded the train master of the conductor.

"I hit an operator," said the conductor.

The train master glared, evidently suspecting attempted humor on the part of the conductor. Once assured that it was not levity he sent the man to join the engineer. The brakeman and fireman had been with the engineer when they "hit the caboose." They were hired without comment. Next came O'Brien.

"And what have you been hitting?" he asked O'Brien. "Don't tell me you haven't hit something. If you haven't I can't use you at all. Well?"

"I hit a beer keg," O'Brien grinned, pointing to his service letter.

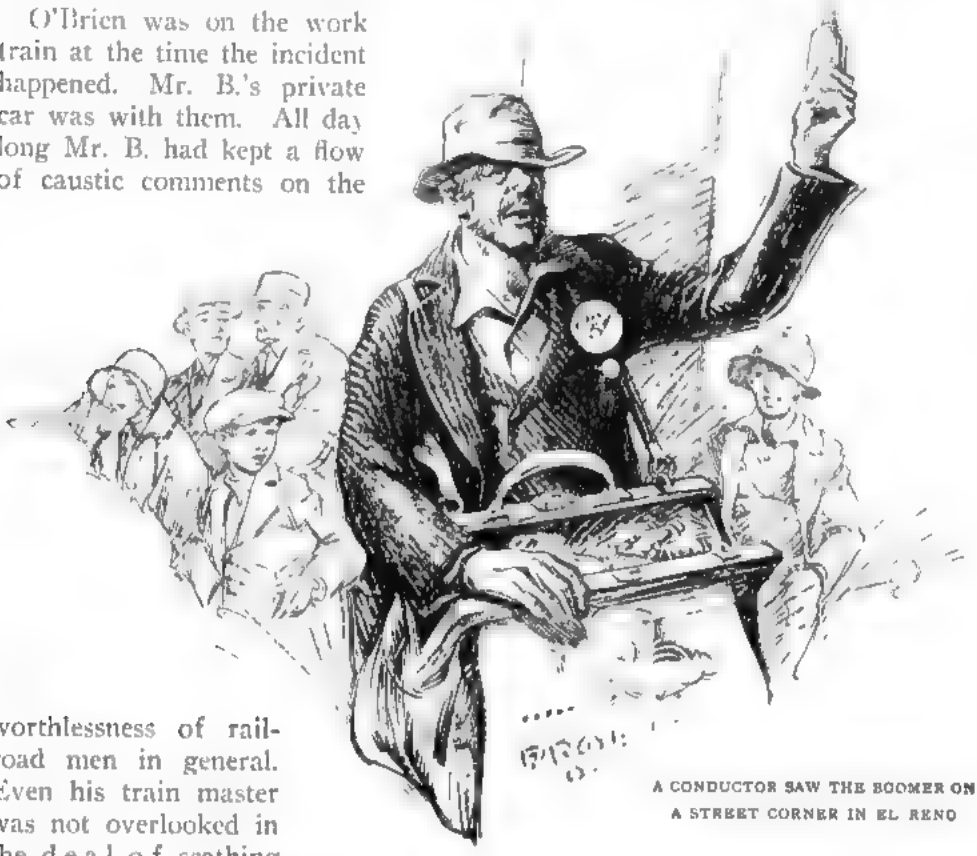
The train master grinned in spite of himself. "Hired," he said. "But if you hit any kegs over here I'll hit you with a time check. Get me?"

O'Brien did, and went to work. Two months later he was permitted to resign and seek another job.

O'Brien never lacked for a reply. It was said of him that he feared neither man, God nor the devil, let alone such things as a railroad official. His bawling out of a certain superintendent on a certain western road is still told in the switch shanties and the cabooses. The only feature of the story is that

whoever tells the story takes it upon himself to be the hero who did it. To date some ten thousand or more brakemen and switchmen claim to be the one and only party to call down the unbearable and snobbish Mr. B

O'Brien was on the work train at the time the incident happened. Mr. B.'s private car was with them. All day long Mr. B. had kept a flow of caustic comments on the worthlessness of railroad men in general. Even his train master was not overlooked in the deal of scathing sarcasm he dealt. He barked at every one.



A CONDUCTOR SAW THE BOOMER ON A STREET CORNER IN EL RENO

It was growing dusk when the halt was called. O'Brien brought the engine back to couple onto the private car and caboose. Mr. B. was in the private car, seated at the dinner table at the time. O'Brien made the coupling, and he made it with such energy and enthusiasm that Mr. B. was knocked to the floor, and the Jap cook threw food right and left with little regard for the high cost of things, and even less for the majesty of the super's person.

Mr. B. righted himself and stormed out the door to heap abuse on the head of the individual responsible. He made no mistake in singling out O'Brien, who was grinning impudently close by. His tirade was long and eloquent, if not in the best of taste.

"You're fired!" he finally bellowed at O'Brien. "Do you know what I think you are? I think you're a flat wheel in the railroad game."

"I'd rather be a flat wheel than a flat head," O'Brien retorted meaningly. "A flat wheel might jar a whole train, but a flat head jars a whole system. Get that, old lemon face?"

A year later Mr. B. was removed from his position as superintendent. To-day he holds an inconsequential

job in a small subdivision as a station master. Who knows but what O'Brien's remark had something to do with his removal? News, whether good or bad, finally filters to the powers that be. Nowadays an official deals out discipline in a way calculated to bring results without bringing resentment in its wake. For, after all, a railroad reflects the attitude of its higher officials, and most men respond to considerate treatment.

O'Brien had many a narrow escape from death in wrecks and smash-ups and falls. But he admitted that only once had he really been scared within an inch of his life. That was the night he was acting as a flagman on one of the Colorado Midland's passenger trains out of Colorado City.

The time was spring, and the Knight Templars, or some other organization, were returning from their meeting out on the coast. There were seven sections of the passenger train that night, and O'Brien was flagman on the third section. To make matters worse it was snowing in the foothills and in the mountains, and vigilance was his at all times, for the other sections were close upon them.

For some reason the train O'Brien was on stopped. Obedient to rules and regulations, O'Brien took his red and white light, his red fuses and torpedoes and hurried back up the track as fast as he could go. He had gone perhaps a hundred yards from the train when he stumbled into a ball of fur. A grunt from the ball of fur and the lanterns and torpedoes went whirling away in the darkness.

"Whoof!" said the ball of fur.

"Lord!" groaned O'Brien. "It's a bear."

It was. And said bear had managed to place himself between O'Brien and the train. O'Brien's yell awoke the echoes in the mountains as he scampered up the track as fast as he could go with the bear at his heels.

"I'm not bragging on my ability as a speedhound," O'Brien used to say in telling the story. "And the gent in the fur coat was no has-been himself. If ever there was a record made for speed in them hills, me and the bear made it that night. But I don't run far before my wind gives out. Running races in a high altitude ain't what it is other places, I know."

It was sheer desperation that brought an idea to O'Brien. Somewhere he had heard that bears were afraid of fire, and since he had the fuses with him, he at least had fire. He lighted one and whirled to see if he could stop the animal.

The bear stopped and began cautiously to circle around O'Brien. The rest of the story is better told by using O'Brien's words.

"Around and around we go. Me and the bear. Every time he gets close enough I do a Jim Corbett act and burn off a little more of his fur. He don't like it, but neither do I. And I'm some worried as to how long I'm going to be able to make my fuses last. If I could ever have got him back of me so I could run for the train I'd done it. But I couldn't. I'm done and down to my last fuse when the fourth section comes whistling around the curve and stops. I climbs upon the engine and Mr. Bear goes off into the hills."

The incident of the bear and the flagman actually happened. Whether O'Brien happened to be there at the time is problematical. Possibly he was.

O'Brien's days as a boomer are over. His wife has seen to that. At fifty he ranks with the other good citizens of

his native town. His only enemy is the superintendent, who lost the best stenographer and chief clerk he ever had when O'Brien coaxed her out of a steady job to be Mrs. O'Brien.

Chaw-Chaw

CHAW-CHAW's nickname came with his first job. How he ever got that job will always remain a mystery. His unfortunate affliction which caused him to chew his words when trying to converse left no alternative except that of a nickname like "Chaw-Chaw."

But he was philosophical about it. "Nicknames," he used to say in his chewed sentences, "are like parents. You don't have much choice in picking them, but somehow they always seem to fit the fellow they're attached to." At times he had his affliction brought home to him by some one, and when he did it ended in fireworks. Once when he applied for a job at Herington, Kansas, the train master shook his head.

"Sorry, Chaw-Chaw," said the train master. "We can't use you."

"Why not?" Chaw-Chaw wanted to know.

"Why, you haven't any voice. You can't talk."

"Chod a'mighty!" Chaw-Chaw choked. "Chidn't know chu wanted chanary birds. I chan chwitch box chars. What else chu want?"

He didn't get the job, however. And Chaw-Chaw wandered on to another division where train masters cared not for the vocal chords of aspiring brakemen or switchmen.

That must have been the trip which sent him to a gulf port to switch for a Southern railroad whose name was never learned. The yards were close to the bay, and one of the lead switches led from the yards out on the dock where boats were loaded and unloaded. Chaw-Chaw was playing in the field—that is, he rode cars that were "kicked" into the different tracks, and set brakes on them so they would not be damaged when they collided to couple up with the other cars on the track. Between times he threw switches as per signals.

It was a strenuous job, and not at all to the liking of Chaw-Chaw, whose experience had been on railroads where a certain amount of spot was the switchmen's lot each night. For the better part of the night Chaw-Chaw rode cars and set brakes and threw switches and rolled his endless cigarettes. By the time dawn was breaking Chaw-Chaw was all in and weary of his job. Whenever he felt that he could get away with it, he let the cars go down against the string without a chaperon at the brake wheel.

The foreman's lantern twinkled a signal to him. Chaw-Chaw interpreted it as an order to throw the No. 7 switch. He did, so he thought at the time, for he was busily engaged in rolling a fresh cigarette. But it was not No. 7 that he threw that time. No, it was the lead switch that led out onto the dock.

The cars rolled by Chaw-Chaw and he let them go alone. Not until they were too far away to catch and ride did Chaw-Chaw see that the cars were headed for the gulf.

"Kerplump!" said the first car as it took a nose dive into the waters. And a second later the second car followed with another "Kerplump!"

"Chod a'mighty!" Chaw-Chaw gasped.

Above the second plump came the bellowing shrieks of the foreman, who wanted to know what the blankety-blank-blank and a few more blanks was

coming off from a blankety-blank bonehead switchman. Chaw-Chaw's *sang-froid* came back with a rush. One swing of his lantern and he yelled to the irate yard master:

"Chut me off chu more! Last chu went in the bay."

They had. And the next day saw Chaw-Chaw once more on the trail of another job.

Chaw-Chaw claimed credit for many of the boomer signals used in the yards and on the road. Perhaps he deserved it. Afflicted with a palate that made articulation difficult, it is reasonable to suppose he invented ways of getting around it, just as he invented ways of explaining things to the yard masters and train masters where he worked when he was mixed up in anything that called for investigations and explanations, mostly verbal.

Chaw-Chaw's star performance came on the Rock Island, where he was acting as temporary foreman of a switch engine in the yards. In railroad parlance, Chaw-Chaw's run was known as the "bum." His duty was to fill in wherever work was the heaviest. This night his time was spent at the stockyards, unloading cattle to be fed and watered before resuming their journeys, for the law permits cattle to be held in cars only thirty-six hours without being unloaded for feed and water.

In one of the cars assigned to Chaw-Chaw and crew for unloading was a Durham bull with haughty mien and wicked eye. His blood was the bluest to be found in bulldom, and he resented the yelling creatures with lanterns who prodded him with sticks and tried to force him out of his home in the stock car. To make a long story short, Mr Durham Bull refused to be moved out of his home. His refusal was absolute—so absolute that when Chaw-Chaw's shift to work was over, Mr. Bull still held his palace stock car against all comers. All Chaw-Chaw and crew had to show for their eight-hour working shift was a partly unloaded car of stock.

Then, in the yard master's office, there was wailing and gnashing of teeth. Two hours later the wailing had been transferred to the office of the train master, who was trying to get the details and reasons why, out of the unfortunate Chaw-Chaw, who rolled cigarettes and chewed his words volubly in attempting explanations. At last the train master gave up in disgust.

"Get out of here!" he snapped to Chaw-Chaw. "Send me up one of the switchmen who was with you. I can't understand a word you're saying."

"Chod a'mighty!" said Chaw-Chaw. "Maybe you chan understand chis?"

With a pencil and paper Chaw-Chaw sketched a cattle car before the wondering eyes of the train master. Whatever else he lacked, Chaw-Chaw knew his details. When the car had been drawn, there began to appear about it men with lanterns and poles and prods. Last, but not least, was Mr. Durham Bull himself, inside the car, nostrils throwing fire, neck stiff and tail pointing out behind him like a stove poker or a rudder.

"Chat's why," Chaw-Chaw said by way of concluding his story. "Now you understand?"

The train master did. To this day that drawing is one of a certain general manager's prizes picked from out of the railroad game.

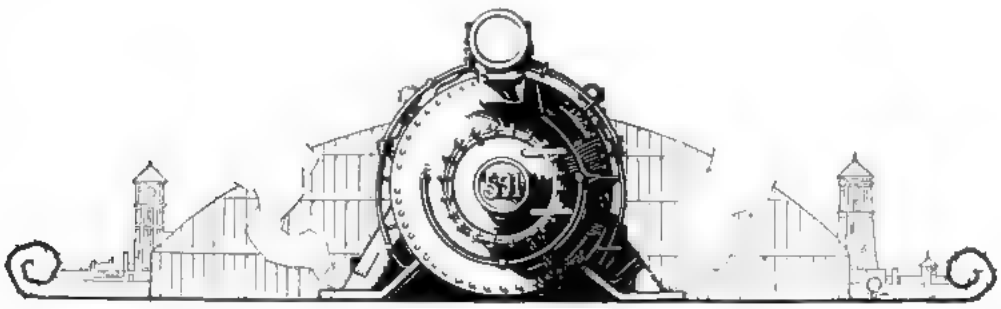
The closing chapters of Chaw-Chaw's life are lost for want of confirmation. Some assert he went back to his farm; others that he was killed

in a collision on the T. B. and V. Whatever the facts, Chaw-Chaw holds his place in the boomers' Hall of Fame.

The others are legion, but not so outstanding, perhaps. It would not be good to close without a mention of Duroc Davis, whose claim to fame lies in the fact that he once outran the Pacific Limited with a drag of loaded coal cars, or J. O. Thompson, who covered the entire U. S. A. as a conductor and brakeman, then tried his hand at farming, only to return to his one and only love, where he could smell smoke, eat cinders, and listen to the wheels click around.

But most of the old-timers have gone to come no more. True, a few are left, if one knew where to find them. Soon the old type of boomer will be as extinct as the dodo and the moa, perhaps even more so. For a while the scientists will devote thousands of pages to telling of these prehistoric birds, the migratory tactics of the boomer will have but the memories of his fellow man in the railroad game to perpetuate his fame

Yet such is history and historians. Like the generals of a war, the builders of the railroad empires will live forever on paper, but the hardihood and bravery of those who made those generals possible are forgotten by all except the few who loved them best.



GROWTH OF RAIL TRAFFIC

JUST what bigger and better power is doing for the railroads in keeping abreast with the movement of freight traffic with fewer engines than in former days is interestingly set forth in figures just released.

According to statistics in 1914, a total of 11,481 locomotives, or twenty-two per cent of the number in use at the beginning of the seven-year period from 1914 to 1921, were retired by railroads. At the end of 1921 these same roads had discarded 9,866 more locomotives, or approximately sixteen per cent of the number in use at the beginning of the period.

There were 19,960 locomotives retired in the seven years ending in 1928, or almost thirty-one per cent of those in service at that time.

To offset these figures the railroads installed in the period ending 1914, 22,030 locomotives; in the 1921 period 11,949 locomotives, and in the 1928 period 14,403. Quite a few engines

Down to the present time the railroads have bought 811 locomotives during the first six months of 1929 and discarded 1 632 At the same time the railroads purchase l 33,497 freight cars and retired 48,0-5

First Aid For the Farmer

How the Railroads Work With Agriculture to Make Two Blades Grow Where One Grew Before

By Charles Frederick Carter

FINDING themselves no longer able to raise cotton enough to support the boll weevil in the style to which it had been accustomed, farmers in the vicinity of Hermitage, Arkansas, asked what the Chicago, Rock Island and Pacific Railway, which furnishes transportation for them, was going to do about it.

"You might raise tomatoes," said the Rock Island, although it knew very well that boll weevils loathed tomatoes.

This advice was followed with results that might have been foreseen. With nothing but tomatoes on the bill of fare, millions of dear little orphan boll weevils starved to death the following season. The Rock Island would not contribute a sou toward funeral expenses of the poor things, but it could squander four thousand dollars on a loading platform for the tomato growers.

This tragedy occurred in 1927. That same year twenty-eight carloads of tomatoes were shipped from Hermitage. Forty carloads were shipped this year. But that is not all. Having seen the light through the kindly offices of the Rock Island Railway, those single-crop Arkansas farmers who had gone broke on cotton plus boll weevils turned to garden truck to which soil and climate are well adapted. Now they are doing first-rate in this country.

Not dissimilar was the case of Kit Carson County, Eastern Colorado, where it does not rain so much as it does in a wetter climate. The principal crop was wheat. In bad years the farmers went broke. A creamery in Colorado Springs was not prospering because it could not get cream enough. The owners devised a plan to stake farmers to dairy cows with payments to be made out of cream delivered. In two years the farmers would own cows that had not cost a red cent in cash. This looked fine on paper, but the creamery folk were still up in the air. They turned to the agricultural department of the Rock Island Railway for quick action. They got it. Dairy cows were promptly shipped in to Kit Carson County.

Now the farmers are drawing an income of six thousand dollars a month on their cream, while the skim milk is worth twelve hundred dollars as hog and chicken feed. Recently they purchased three carloads of blooded bulls to improve their herds and are well on the highway to prosperity.

They Uprooted a Forest

Or take the case of the northern part of the southern peninsula of Michigan.

When the timber was cut off, all that was left was soil no better than it should be, thickly dotted with stumps. The government had left over from the war immense quantities of explosives which could be delivered in Michigan for eight cents a pound. After securing the coöperation of Michigan State College, the State Agricultural Department, the Northeastern Michigan Development Association, State Farm Bureau and other organizations, the Michigan Central put on a demonstration train to show those northern folk how simple and easy it was to evict an unprofitable stump with a charge of dynamite.

After stumps were out of the way, this part of Michigan proved to be well adapted to potatoes and forage crops which, being interpreted, means dairying, and summer boarders. Instead of shipping out their surplus potatoes, those Michiganders fed them to the summer boarders, and by so doing developed a new angle to their business. If the boarders manifested unusual interest in a lot of potatoes, passing their plates for second and third helpings, that lot was set aside to be sold to farmers elsewhere at fancy prices for seed, while other supplies were found for the boarders. Michigan seed potatoes now have high repute.

Yes; but if those farmers, south, west, and north, needed first aid, why did they not go to Congress for it?

What! After all the experience they have had?

No, indeedsky! In these enlightened days, when a farmer strikes a snag he telephones to the agricultural agent of his pet railroad; and before he can hang up the receiver that agent is at his elbow with specifications for getting rich quick which, unlike other schemes, never fails to produce results.

In other words, while Congressmen are asking l e a v e to extend their affection for the farmer in the *Congressional Record,* the railroads are working in friendly coöperation with the farmers to apply science to agriculture, thus increasing crop production, improving quality, lowering costs, and enlarging profits.

All this, however, applies only to minor crops, such as corn, wheat, cotton, potatoes, live stock, and poultry. The principal crop, which as everybody knows is votes, is ignored. As a matter of fact, the railroads don't care a darn whether anybody is ever elected or not; and the farmers' interest in the subject is but little more profound.

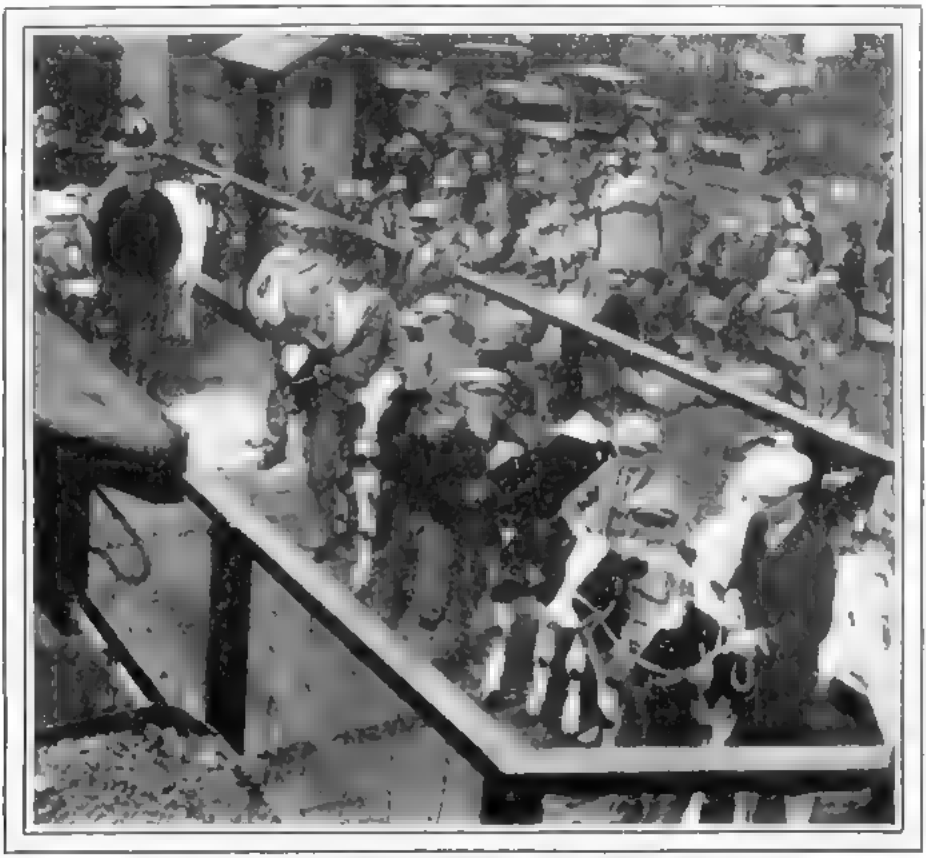
Well, if you get right down to brass tacks, successful farming is not so much a matter of legislation as it is of horse sense and hard work. The farmer supplies both to the best of his ability; but even so, there are times when he can use a little help to advantage.

One friend which has never failed the farmer in his need is the railroad. Coöperation of railroads and farmers is founded on a sordid commercial understanding. Production and prices appeal to the farmer more strongly than corporate or political affection; while as for the railroads, few stockholders would refuse a dividend if offered.

You see, while farm population constitutes one-fourth of the total, it does not contribute its proportionate share of railroad traffic; and even this disproportionate s h a r e is decreasing Thus, tonnage of agricultural products decreased 3.3 per cent from 1919 to 1927,. while animals and products decreased 24.7 per cent in the same period. In the latter year agricultural

products constituted 0.37 per cent of the total tonnage, while products from animals and products 0.57 per cent. Also, agricultural implements and fertilizers hauled to the farms, and the grand total of tonnage directly traceable to the

Both parties being dissatisfied with the returns, what more natural than that they should put their efforts to increase them, more especially after they had learned by experience that such methods were effective? Division of



HOW THE NEW YORK CENTRAL EQUIPPED ITS BETTER DAIRYING TRAIN

farm population is less than one-eighth of the whole.

Making the Meadows Yield

To be sure, there is an additional amount of merchandise and miscellaneous tonnage which cannot be traced through [illegible] to the farm, but the most generous estimate of this hidden tonnage consistent with reason would still leave the farm average far below that of the country as a whole.

labor is fair enough. The railroads demonstrate the latest and best methods of scientific agriculture, and haul the crops to market, the farmers do the rest.

Talk about making two blades of grass grow where one grew before! Why, a railroad will run a demonstration train over its lines and lo! a whole meadow flourishes where but yesterday that lone blade languished.

Instead of living on an exclusive diet

of salt meat and potatoes and developing dyspepsia and jaundice and pimples and dying young, as our forefathers did, we are diluting our proteids and carbohydrates and things with more than a million carloads annually of fresh vegetables and fruits and living so long that many undertakers are growing discouraged and going out of business.

Now, you do not suppose that million carloads of fresh vegetables and fruits a year just happened, do you?

First, the railroads figured out tariffs on such things so low that, in effect, the whole continent became a kitchen garden for any particular spot thereon. For example, the freight on a head of lettuce from the Imperial Valley to New York is less than a cent. That head of lettuce retails for twenty-five cents, or thirty-five cents if your address sounds like money. The farmer doesn't get much more out of it than the railroads, but he just loves to see the commission merchants and green grocers flourish, and that made it easier for the railroads to persuade him to go into truck farming, which they proceeded to do.

The Texas Gulf Coast country which a quarter of a century ago grew nothing but mesquite and rattlesnakes, ten acres of which were required to pasture one steer, now produces many thousands of carloads of vegetables and fruits. That's railroad development.

The Ozark Mountains in Missouri and Arkansas, which until a few years ago produced nothing but characters and scenic background for inferior fiction, now ship thousands of carloads of strawberries and other delectable dainties to northern markets that welcome them gladly. Again, that's railroads.

But let me tell you about demonstration trains.

Remember that Michigan Central stump-blasting demonstration train mentioned in the foregoing? Well, the next step was to interest the local banks and as many organizations as possible along with the farmers in promoting the dairy industry to which the region was so well adapted, and which flourishes so marvelously in Wisconsin, just across Lake Michigan from the southern peninsula. Dairying is a sure-fire industry because the market for its products never seems to fail.

First off, the railroad, the banks and other organizations purchased several carloads of pure-bred dairy cows, which were distributed among farmers in that region; not as gifts, to be sure, but on the most favorable terms possible. At the same time the Michigan Central Railroad purchased six pure-bred dairy sires, which were loaned free to the farmers.

The following year seventy-odd pure-bred bulls were loaded on a "Better Sires Demonstration Train" and taken into the newly developing dairy country, where, with the cooperation of the State Agricultural College, Farm Bureau, Holstein-Friesian Association and others, they were swapped for a similar number of scrub bulls which were translated into beef.

This, by the way, is one of the favorite activities of railroad agricultural departments. For instance, the Minneapolis, St. Paul and Sault Ste. Marie has placed with the farmers along its lines away up north ten thousand pure-bred dairy cows, not to mention fifty thousand pure-bred sheep. On the opposite side of the country the Illinois Central has been successful in developing dairying in Mississippi, a State you

probably never thought of in connection with that industry. There were but two creameries along the Illinois Central Lines in that State ten years ago. But the railroad interested farmers in cooperative movements to guarantee

HERE'S HOW CHAMBERS OF COMMERCE IN AGRICULTURAL COMMUNITIES TURN OUT THE BAND TO MEET THE DEMONSTRATION CAR

creameries certain quantities of milk. Pure-bred bulls were brought in by the railroad and loaned free of charge to the farmers.

To-day there are twenty-five creameries where but two grew ten years ago, not to mention several cheese factories and condenseries, which, together with the creameries, pay farmers in their vicinity ten million dollars a year, all profitably supplied by graded cows. The farmers are making money, and the Illinois Central picks up a little odd change.

Profits Widely Beneficial

In fact, everybody gets something out of railroad-promoted dairy enterprises. The banks earn interest on money lent to buy herds, the farmers make money, the local merchants get something out of it, the packers pocket a profit from converting scrub bulls into beef, the railroads in the long run are recouped for the loss in swapping costly pure-bred bulls for scrubs, and the dentists are kept busy repairing and replacing teeth ruined in trying to masticate bull beef

In addition to their practical value,

these better-sire demonstration trains are almost as good as a circus. As an example, take the New York Central's better-sire demonstration train operated on its lines in Pennsylvania last fall. The train consisted of ten cars, of which three were palace horse cars, each containing sixteen pure-bred bulls in separate stalls consigned for sale by breeders. Another car contained exhibits from the United States Department of Agriculture, telling vividly the need of and profit in better dairying methods, and on cattle diseases in charge of a man from the department. Pennsylvania State College had a car filled with exhibits illustrating phases of economic dairy production.

The star performer on this train was a scrub bull in the baggage end of a combination car beneath a sign announcing that he was "the most expensive sire in the world for any farmer to own." Whenever he had an audience he would give a dissertation in a deep bass voice, like distant thunder, on the folly of wasting good feed on scrub cattle and on their general worthlessness for any purpose. Of course he did not really talk, you know; for no gentleman cow, whatever his ancestry, would stand up in public and traduce himself. The illusion was created by a clever electrician with the aid of a talking machine record and a loud speaker.

Perhaps the New York Central should not have practiced such deception; but, on the other hand, the end may have justified the means, for in twelve days that train placed no fewer than eighty-two pure-bred sires.

But let's get back to Michigan. Having fixed the idea of raising pure-bred dairy cattle as an unfailing meal ticket, the Michigan Central launched a limestone and legume program as a step toward growing provender for the cows, not to mention other crops. A gift from quarrymen of six carloads of limestone was distributed by the railroad as free samples among twenty farmers in each of six counties. You see, three-fourths of Michigan's arable land is too sour to produce profitable crops. This condition can be remedied by spreading limestone.

So the distribution of samples was followed up by running a limestone demonstration train, on board of which were soil specialists who lectured and showed visiting farmers how to make simple tests to ascertain whether their soil needed limestone; and if so, how much per acre. Since then a good many hundreds of carloads of limestone have been added to Michigan soil.

In the matter of sour soil Michigan has nothing on adjacent States. All the railroads throughout the Middle West are running limestone demonstration trains and preaching limestone through their agricultural departments to farmers in their respective territories, and even running carloads of limestone out on the main line, when traffic conditions permit, to be unloaded between stations free of switching charges to make it easier for the farmers to get their soil tonic with the least possible trouble and expense.

Next in order for that light Michigan soil was an alfalfa demonstration campaign, for alfalfa or clover follows limestone in a soil-building program. Besides, alfalfa is prolific and valuable fodder.

Potatoes in Abundance

Once the soil-building campaign was well under way, the Michigan Central turned its attention to potatoes, to which the southern peninsula is partic-

ularly adapted. Yet as recently as 1923 Michigan potatoes were discriminated against in the markets. Coöperating with Otsego County, the railroad participated in a "Top o' Michigan Potato Show" to tell the world about the virtues of those northern spuds. Following this, potato growers in the county contributed a carload of seed potatoes which the railroad distributed free of charge in small lots throughout ten counties in southern Michigan.

This was the beginning of the trade in certified seed potatoes from northern Michigan, which this year amounted to more than one hundred and fifty carloads, at fancy prices, of course. Moreover, the Michigan Central, again coöperating with Otsego County leaders, has developed a market in Detroit for northern Michigan potatoes at advanced prices in contrast with reduced prices six years ago. Last spring the railroad ran a "Better Seed Train" to demonstrate the importance of using greater care in selecting better seed corn, beans, alfalfa and other Michigan staples to insure better crops.

The Union Pacific promotes dairying in its territory by organizing Boys and Girls Calf Clubs, by exchanging pure-bred bulls for scrubs, and in other

A VIEW OF THE INTERIOR OF A CAR EQUIPPED TO GIVE THE FARMER THE VERY LATEST INFORMATION ON HIS PROBLEMS

ways. Its agricultural department undoubtedly deserves a generous share of credit for Nebraska's increase of 70 per cent in creamery butter production since 1920, giving the State its present rank of fourth in this industry, and for an increase of 171 per cent in cheese production in 1928 as compared with the preceding year, not to mention an increase of two to three tons an acre in sugar beet production since the railroad began running a sugar beet demonstration train.

The Chicago, Burlington and Quincy specializes in poultry demonstration trains, although it does not overlook any other features of agriculture. Kansas railroads coöperate with other agencies in putting on "wheat festivals" with a view to increasing production per acre rather than more acreage. With this end in view methods of combating the Hessian fly, chinch bug, and other insect enemies of wheat are demonstrated.

On the Pacific Coast, the Southern Pacific features motion pictures as an effective means of reaching Boys and Girls Clubs; for the fact is recognized here as elsewhere that if the country is to have more efficient farmers the younger generation must be brought up in the way it should go. The Southern Pacific makes liberal use of demonstration trains, in coöperation with the State Agricultural Department

On the Atlantic Coast, the Seaboard Air Line, Atlantic Coast Line, Southern Railway and others conduct energetic educational campaigns to encourage more efficient farming. They all have agricultural departments with rather numerous staffs, each member of which has a certain territory to cover. The Seaboard features personal service, particularly in the case of new settlers, with periodic visits to make sure that the farmer is able to meet conditions as they arise. The same railroad is working hard to introduce diversified farming. It has been instrumental in introducing broccoli, now shipped in carload lots to metropolitan markets from points all the way from Florida to Savannah. The Seaboard on its demonstration farm at McBee, South Carolina, has proved that some two hundred varieties of European grapes will flourish on the Atlantic Coast at least as well as, if not better than, on the Pacific Coast.

A Commendable Step

Through the efforts of the Seaboard the wonderful peaches grown along its line will be introduced on the London market where inferior fruit from South Africa retails at twenty-five cents a peach. The same road is trying to introduce tung oil trees, which grow readily on Southern soil. Tung oil is valuable for varnishes and numerous other uses. Imports doubled in quantity and quadrupled in value from 1914 to 1926.

The Seaboard is fostering rabbit—or, rather, Belgian hare—breeding in Florida with considerable success. The hare, as you know, is the principal source of supply for sealskin coats. Big Japanese plums and papayas, a tropical fruit like a small cantaloupe, are also being introduced along with many other features to assist farmers to increase their incomes.

Always and everywhere, from the Atlantic to the Pacific and from the Soo to the Rio Grande, the railroads coöperate with agricultural colleges, with county agricultural agents, and with agricultural committees of chambers of commerce, with bankers, and with every one who wants to help in a practical way. They are modest

about it, too. Railroad agricultural departments never take a curtain call, but retire bashfully to the wings and push the other fellows out into the spotlight

You can understand what it means to the railroads if you will remember that the average yield of wheat is only 14.7 bushels per acre. At that rate it would take the crop from one hundred and thirty-six acres to make up one carload, and that one carload is all the outbound freight from those acres for a whole year. If through wheat festivals and demonstration trains and such like the average yield could be increased half a bushel per acre, there would be more than fourteen thousand additional carloads of wheat to haul to market.

But this is only one side of the picture. The extra millions the farmers receive through the assistance of their friends, the railroads, are not all hidden away in the old sugar bowl on the top pantry shelf, but are largely invested in automobiles, radios, water supply, light and power installations, Sunday clothes, paint—both barn and face—and so many other things, that inbound freight is equal to one hundred per cent or more of the extra crops the railroads haul away as outbound freight. The railroads *have* to raise money somehow to pay taxes, interest on mortgages, operating expenses and such like; and every little helps. It helps a whole lot, and the railroads realize it fully.

Unfortunately, no statistics exist on which to compute the value in dollars and cents of assistance rendered to farmers by railroad agricultural departments. But here is a small clew The Missouri, Kansas and Texas spends on its agricultural department thirty-five thousand dollars a year. Four years after the department had interested itself in one Oklahoma county from which there had been no carload shipments, such shipments had reached a value of eight hundred thousand dollars a year, or more than twenty-three times the total annual expenses of the department from a single county.

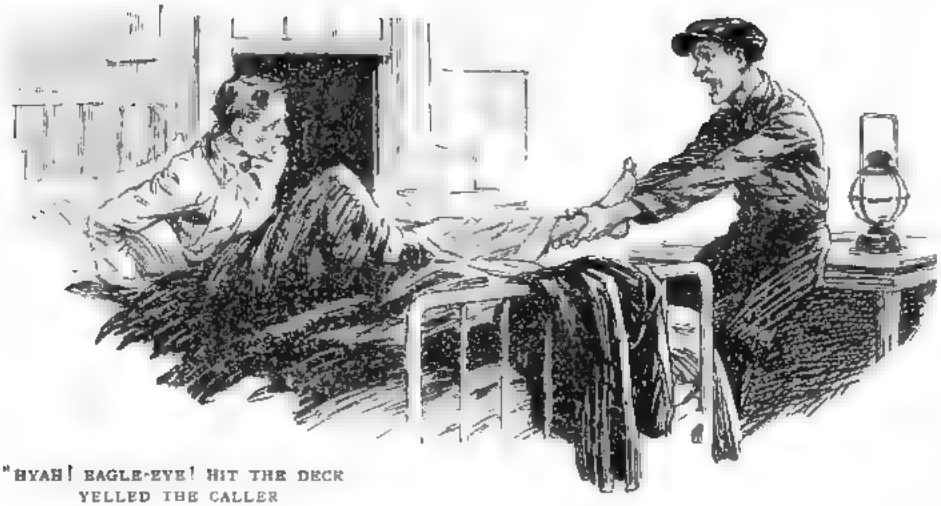
RAILROAD MEN AND THE GOSPEL

THE efficiency of railroad men, the religious and faithful manner in which they perform their work and the sincerity which they devote to their efforts are held up by P. Rowland Wagner, pastor of the largest Baptist Church in Norfolk, Virginia, as a standard by which all people ought to govern their lives. And he has something to back his opinion.

The Rev. Mr. Wagner was one time a clerk in the shops of the Baltimore and Ohio Railroad, and many times in his sermons he refers to what he pleases to term "the old days at the shops and repair tracks where I got my start and where I left many good friends."

This minister says that if he had his way, every theological student would go to work in a railroad shop in order that he might get a true cross-section of life as it is. The Rev. Mr. Wagner would have the students spend years working with railroad men, living with them, playing, working, and eating with them.

If the Baltimore and Ohio helped the Rev. Mr. Wagner along to the high place in his ministerial duties, that railroad also has played a good part in the life of Dave Roberts, a noted writer of hymns, who has stated that much of his inspiration came to him while riding on the Baltimore and Ohio suburban trains. Mr. Roberts has given the clicking of the wheels over rail joints credit for inspiring many a hymn.



"HYAH! EAGLE-EYE! HIT THE DECK YELLED THE CALLER

Lost—One Locomotive

Sam and Suydam Strayed From the Main Line to Face Death In a Bank Holdup Get-away

By John A. Thompson

EXTRA Fifty-six, running light, rolled out of Nome at four minutes past midnight. Steam wheezed from the groaning cylinders of the old 4-4-0 American as she clattered over the confusion of switches that marked the yard limits and straightened out on the main line.

Only a few minutes before her departure a vociferous call boy had broken into Sam Tebbetts's distinctly audible slumber with a hearty shout:

"Hyah, eagle-eye! Hit the deck! Boots on, hoghead!"

Sam opened a wary eye, saw the unwelcome but familiar figure standing at the foot of the bed, and threw a shoe at it. The lad ducked, but he was armed with the authority of a special order. He grabbed the little engineer by one leg and hauled him bodily off his couch.

Having roused Sam, and having made certain that the engine driver was putting on his clothes and not going back to bed again, the youth left to wake up Suydam Plapp, biggest, bulkiest, and brawniest fireman on the Nome and Kougarok Railroad. Plapp slept in the room next to Sam's.

"Come on, ye ol' hipperpotamus! Shake a leg!" yelled the call boy, pulling at the fireman's ear. "You and Sam's gotta take Fifty-six to the Kougarok to-night. They ain't got nothin' up there to bring the mornin' passenger train in. The reg'lar engine's broke down, and the roundhouse can't get her fixed in time."

Plapp indicated with a grunt that he wasn't interested. The call boy didn't

care. When he was told to do something, he did it. Plapp got up, and he was still addressing uncomplimentary remarks to call boys as the most pernicious influence in railroading when Sam settled himself at the throttle and eased No. 56 onto the five-mile stretch of swampy tundra that lay behind Nome.

Once out on the flats, the engineer gave her all the steam at his command. Fifty-six picked up speed quickly, and swung on till she came to an easy curve that led to a narrow pass through the mountains.

Yanking on the whistle cord, Sam screamed past the telegraph station at Huntley Creek. The operator there watched him flash by, looked up at the clock on the wall, and clicked a terse message to the station next ahead.

Tebbetts took the next three and a half miles of one-in-eighty grade on the fly. His eyes straining on the road ahead of him, he leaned far out of the cab window as his engine rushed out along a mountain face, tilted careening around a bend, and cut across a bottomless black gulch on a high, horseshoe trestle that swayed crazily beneath the sudden weight.

With a clear track No. 56 shot by Moore, Moonglow, Forbesville, and Ptarmigan Gulch. The single pair of steel rails that was the road's main line seemed to melt and flow under her wheels in the white glare of the headlight.

Tebbetts made his meet with No. 17, a south-bound accommodation, at Open Bend. Twenty-nine miles above the Bend was Crowder's Flume. Sam's orders called for a meet there with No. 49, the road's crack fast freight coming down nightly from the Kougarok to Nome.

"Tebbetts is late," snapped Jim Flynn, the third trick operator at Nome

He ripped a sheet of yellow paper off the pad on which he had been writing and handed it to Clancy—lantern-jawed Clancy, the dispatcher.

"No. 56 fourteen minutes late. Holding No. 49 south-bound—C. F.," read the message.

Clancy scratched his chin.

"The blamed idiot!" he said. "What's holding him?"

Flynn shrugged his shoulders.

"If Tebbetts don't show up soon, he'll have the main line tight as a drum. There'll be hell to pay when old man Slawson hears about it!"

"Those two circus freaks are always getting themselves and the rest of the road into jams," grunted Clancy. "It's a wonder the super don't have them canned."

"Slawson likes 'em," declared Flynn.

"He won't like them any longer if they don't get Fifty-six into Crowder's Flume pretty pronto," snorted Clancy.

Other messages came in from the Flume. More south-bound trains were coming down, and because Engine No. 56 was needed so badly at the Kougarok the others were kept waiting on the siding.

Suddenly Flynn tensed over his key. His hand trembled as he wrote.

"What do you make of it?" asked Flynn.

"I—I—hell, the man must be crazy!" replied Clancy, sickly white under the gills.

"Bob Beckley's steady. He doesn't make mistakes often," said Flynn slowly.

Clancy reread the message aloud.

"'Short haul freight No. 32 northbound from Open Bend just passed through C. F. on schedule. Crew re-

port main line clear. Where's Extra 56? Or am I nuts? Toodleloo!—B. B.'"

"I checked on Open Bend," said Flynn, "and the man there swears Fifty-six went by as and when he first reported. In fact, he asked if we were all drunk down here, or what."

"But locomotives don't vanish into thin air," expostulated Clancy. "It's impossible!"

"The hell it is!" snapped Flynn. "Fifty-six has done it. Better raise the super and tell him one locomotive, one pint-sized engine driver, and one fireman weighing two hundred and fifty pounds are lost, strayed, or stolen from the main line somewhere between Open Bend and Crowder's Flume."

"Yeh! He'll be glad to hear it, too," growled Clancy sarcastically.

II.

TEBBETTS had cleared the telegraph station at Open Bend as the operator there duly reported.

Two miles beyond the station was a long down grade, and Sam, trained to economy of steam whenever possible, shut off the throttle gently. Relaxing for an instant, he turned to Plapp.

"You ain't still mad, are you?" he said suddenly.

Plapp looked over at the little man for whom and with whom he had fought and quarreled incessantly during the years of their joint career as itinerant railroaders.

"I ain't mad at nobody," said the Dutchman slowly; "but I hate ridin' with dumb engine drivers. It ain't safe."

"I proved to you they gotta have call boys on a railroad, ain't I?" declared Sam.

"Nope," said Plapp, and he glanced at the throbbing pressure gauge.

"You're a liar!" barked Sam.

Plapp looked up at the water glass, which showed the boiler a little less than three-quarters full.

"I ain't dumb," began the fireman in a heavy monotone; "but I know they could invent a more civilized system for wakin' a guy than call boys. They ain't necessary."

"They are," corrected Sam with asperity.

Sam stuck his head out of the cab window and let the raw night wind whip through his bushy thatch.

Beyond the grade down which he was flying the main line forked. The left-hand fork veered in a wide, sweeping curve around a dome-shaped mountain and then went on to Crowder's Flume and the Kougarok. The right fork was an abandoned spur that continued straight ahead for half a mile, then swung in an easy arc across the valley, and brought up in a dead end at Van Horn, eighteen miles away. It had once been used to ship bullion from the gold mines at Van Horn, but a rough road, passable for motor trucks, was built from the camp into Nome, and with the mines doing all their hauling by truck and van the spur had fallen into disuse.

Fifty-six rattled over the switch, ran straight ahead, then swung to the right. Sam jumped to the window. He looked back along the track.

"Hey!" he shouted to Plapp. "That's the spur, and there ain't no light on the switch!"

"How about backin' up and gettin' on the main line again, bone dome?" inquired Plapp. "We're swingin' around on the spur."

The next instant there was a grinding of brakes, and Extra 56 bumped to a halt in a series of racking jerks that nearly threw Plapp against the red-hot

firebox. Tebbetts heard the big fireman curse, but never turned his head. His eyes were fastened sharply on the flare of a red fusee burning like a devil's torch in the blackness just ahead of him.

Sam's lids narrowed as he watched the dancing flame. He was up against something he couldn't understand—traffic on a supposedly long deserted spur.

"Say, that blamed thing ain't been uncapped but half a minute," he called to Plapp. "It popped up right as we came around the turn."

"It's a wonder you wouldn't tell a guy when you're goin' to stop like that," growled the fireman.

Suddenly a harsh voice close under the cab on the engineer's side barked a command:

"Stick 'em up! 'Way up, you birds, and hold 'em there!"

The order was followed by a pistol shot for emphasis, and a bullet shattered the glass in the window behind Sam's seat. A masked figure clutched at the hand rail and started to board the engine. The stranger carried a heavy caliber six-gun, and there was something in his manner which warned Sam that he wouldn't hesitate to use it.

Nevertheless, the engineer had no intention of having his locomotive taken from him without a struggle. Swift as the speed of light his foot shot forward, catching the bandit's gun wrist a blow that all but broke the bones in it. The man snarled with rage, grabbed for Sam's legs, and caught one of them.

Both men crashed to the roadbed. Hurling blows and strong language at each other, they rolled into the drainage ditch at the side of the tracks.

"Plapp!" shouted Sam. "I'm holdin' the skunk for you. Come on, Plapp!"

"Comin'!" sang out the Dutchman.

As he jumped from the cab, a second figure loomed out of the shadows beside the tender, and a wrapped length of lead pipe caught him behind the ear. The big fireman reeled, and for a moment he tottered on the edge of the ditch. Then, with the roar of a maddened bull, he tore into his assailant.

A third man dashed down the tracks from the direction of the flare. He carried a gun, but he clubbed it as he sailed into Plapp.

From the ditch below Sam sent up another cry for his fireman. The only reply he received was the sound of fighting on the roadbed. With a desperate effort the engineer broke from the clutches of the man with whom he was struggling. Panting, he rose to his feet. The bandit was after him.

Crack! Sam caught a vicious right jab over his left eye.

Wham! Wham! The bandit took a one-two brace of punches in the stomach, his most vulnerable spot.

A left swing clipped Sam on the side of the head and sent him spinning. Groggy, the little engineer weaved forward, still ready to give and take more punishment.

Small as he was, Sam was dynamite in a fist fight. Sudden desperation seized him. He realized that he had to keep on. He was probably fighting for his very life. He had to fight for his sidekick, Plapp, and for old Fifty-six, the puffing locomotive that stood on the rails, a grim and helpless witness to the struggle of the man who was loyal to his trust.

Sam battled like a box car full of wild cats. It is born in the breed of men like Tebbetts to go at everything to the last ounce of their strength.

The fighting on the roadbed seemed

to have ceased. Sam wheeled quickly, sensing rather than seeing the stealthy form that crept along in the blackness of the ditch behind him. Out of the corner of his eyes he caught a glimpse of an upraised bludgeon. The next instant a lead pipe crashed solidly to his skull.

"That's both of 'em, Larry!" growled the man who had dealt the blow. "Tough babies, I'll tell the cock-eyed world!"

Larry Day, alias Larry the Link, master train robber, bank thief, and murderer, wiped the blood from a cut on his sneering lips.

"Where's Matt?" he demanded. "Give him a hand, Joe, and get these birds back into the cab."

A KICK ON THE WRIST SENT THE GUN INTO THE DARKNESS

III.

WHEN Sam came to, he was sitting on the floor plates of his engine cab, his shoulders sagging against the fireman's seat box. Plapp, at the point of a pistol, was weakly tending his fires. Larry the Link bent over Sam. His shirt was torn and bloodstained, and his ugly mouth curled in a horrible grimace.

"Wise guy, ain't you?" he snarled. "Fer two bits I'd put you on the spot right now, see?" His scowl darkened.

He waved a gun in Sam's face, his forefinger caressing the trigger. In spite of himself, Sam winced.

Matt and Joe pushed forward. They were bull-necked and thickset in contrast to the lean figure of Larry.

"Aw, what's the sense of bumpin' off the little runt now?" muttered Joe.

Larry fastened his cold, gray killer eyes on Sam and held them on the little engineer. Then he lowered his gun very, very slowly.

"Git up!" he snapped. "Git over on the other side of the cab! You're goin' to take this steampot up the line, savvy?"

He stuck his gun under Sam's nose, his fingers itching to pull the trigger.

His hand on the throttle and the barrel of a six-gun boring in his back, Sam urged the Fifty-six along the rails. Gradually she picked up speed.

"Faster, faster!" urged Larry, till the locomotive was rocking madly over the spur toward Van Horn.

Sam wondered why these men wanted her, what they were going to do with her. He had never heard of men stealing a locomotive before.

Just before the tracks reached Van Horn they skirted a swift mountain stream that cascaded wildly through a narrow gorge. The roadbed was built along the water's edge. Where an abutment of native rock sloped steeply down to the river, a tunnel had been blasted through the cliff. It was not a long tunnel, less than four hundred yards from entrance to exit; but the engineers had found it cheaper than attempting to run the line around the face of the sheer rock wall.

Larry ordered Tebbetts to slow down as he approached the tunnel. A hundred yards inside it, he told Sam to come to a full stop and douse his headlight. The red glow from the roaring firebox threw fitful shadows on the dank and dripping walls. Green slime spread over the tunnel floor. A musty odor filled the unwholesome place. Fortunately a strong draft carried away most of the smoke and coal gases from the exhaust.

Even as the engine stopped, the men in the cab heard some one shuffle along the tunnel and stumble. A moment later an arm reached for the gangway on the right-hand side of the locomotive, and a heavily built man swung himself aboard. He swayed unsteadily as his bleary eyes surveyed the group in the cab.

"Tebbetts an' Plapp!" he murmured. Then he turned to Larry. "You got the wrong guys, but it don't matter. An engine's an engine."

Tilting a battered derby to a giddy slant over one ear, he whipped two short-muzzled automatics from twin shoulder holsters under his armpits. He twirled them by the trigger guards around his right and left forefingers respectively.

"I'll watch these babies. Friends o' mine, they are," he sneered. "You guys do your stuff." Then he wheeled toward Tebbetts, herding him and Plapp into a corner of the cab. "'Member Derby Smith, ex-freight shack on the old Nome and Kougarok?"

Sam and Plapp both remembered Derby, a boastful, drunken braggart.

"You never did like me, did you, Sam?" snarled Derby. "Well, if you don't step pronto when I say so, I'll blow yer blamed head off, see?" He snapped the butts of his revolvers into the palms of his hands and held the two guns against Sam's forehead. "*Ping, ping,*" he said derisively, "and there ain't no more lousy little Sam Tebbetts."

"Hold 'em till we get back," called Larry the Link, as he climbed off the engine and was followed by Matt and Joe.

"And how!" replied Smith, his laughter ringing unpleasantly through the tunnel, echoing and reëchoing down the darkness till it was lost in the distance.

It was laughter that sent cold chills creeping up and down Sam's spine; but the dead silence that followed seemed even more ominous.

"You poor boobs!" said Derby suddenly, leaning against the side of the cab. "Still workin' for the road! Why don't you git some flash to you, and git into a decent racket where there's money in it? Easy money, that's Der-

by Smith! No more slavin' for a lousy pay check!"

"Is the holdup business so good?" inquired Plapp seriously.

"Good! Say, I made—" Suddenly Derby's eyes narrowed. He looked at the big Dutchman. "Askin' for information, or do you just want to know because I ain't goin' to tell you anyhow?"

Smith seemed to find his own witticism very amusing.

Sam was wondering what the chances of success would be if he tried to rush Derby. He decided to wait for the first opportunity that might present itself. In the meantime he urged Smith to talk some more. Derby needed very little encouragement.

"Funny how you guys got nabbed," he went on. "Don't think I ain't got brains, either. It was me master-minded the whole scheme. Larry comes to me a while ago and says he's got a swell job all set, only he can't figure on a fast enough get-away.

"'What is it?' I says. 'Maybe I can help you, Larry.'"

Derby Smith paused to come closer to his prisoners.

"Larry's got it all doped out to knock off the Van Horn bank, gold dust, cash, and all; but it takes me to think of the spur.

"'Listen, Larry,' I says, after explainin' how the spur ain't used no more. 'I can git a switch key and we can throw an engine our way, stop it with a flare, run it up here, hide it in the tunnel, and use it to git us back to the main line, where there's a decent highway runnin' into town.'

"Larry says he'll fix it about havin' a car waitin', and we figure on gettin' Pop Larkin on Thirty-two, the short-haul freight from Open Bend. We git a guy to throw the switch, then he's to throw it back again and wait for us with the car. It won't take the boys long to stick up the bank, neither."

"It's a good idea," said Plapp solemnly.

"Sure it is, and I thought of it," said Derby, swelling with pride. "Only you ain't heard the joker yet. Larry and me argues about what we'll do with the crew. We figured on a freight train, and I says, what would we do with 'em?

"'Bump 'em off,' says Larry. 'Dead men don't never take the witness stand against a guy.'"

Plapp shifted uneasily in the corner. Sam's face was expressionless.

"That's how it is," continued Derby. "You guys comin' along first most likely saved Pop Larkin's life. The joke's on you!"

"Yeh?" grunted the big Dutchman.

Derby winked.

"I'm goin' to tip you birds off to somethin' about Larry. He won't drop you in cold blood. He ain't that kind. He'll git you in a fight and gang you. That's his play. I'm tellin' you so's you'll be ready."

"Thanks," said Sam.

He noticed the neck of a bottle sticking out of Derby's hip pocket. For a long while he let Derby talk on, arrogantly boasting how great he had become in the outlaw world. He talked like a man whose tongue had been loosened by liquor, and Sam was convinced that the man was half drunk already.

"Hey, Derby, how about a little drink?" suggested Sam suddenly.

Smith put both his guns in one hand, reached for the bottle, and pulled the cork out with his teeth.

"Here's to success—and the 'ell with you, Tebbetts!" he laughed, tilting the bottle to his own lips.

Sam moved with spring-steel swift-

ness, jumping for the hand that held the two guns. Smith snarled. There was the clatter of broken glass as he let the bottle fall to the floor plates. Two spurts of orange flame flashed across the cab as Derby fired, and Sam felt the lead slugs fan past his face. Another crack of the revolver, and he felt the sear of a bullet that creased his leg.

The next instant a terrific impact struck him from behind. He was carried close to Derby—close enough to smell the stinking breath of the drink-sodden man—and the two of them fell to the floor plates beneath the crushing weight of Plapp's two hundred and fifty pounds. Plapp had literally hurled himself at Derby a split second after Sam made his first brave rush.

Cut, bruised, bleeding, the three fought on the floor of the cab. Sam threw his hammer-hard fists with the frenzy of a madman. He was fighting to get back his engine, and Plapp was there beside him. Six men of Derby's caliber would have succumbed to that attack. He tried to protect himself, but his face was fast becoming a mass of bloody pulp.

"We got him, Shordy!" exclaimed Plapp, scrambling to his feet.

Sam's reply was never heard, for the crack of a six-gun drowned it out as Larry and his two companions clambered into the cab. Plapp caught a gun butt on his skull.

"Up with 'em!" commanded Larry, and Plapp obeyed.

Sam was knocked to the floor brutally, jerked to his feet, and ordered to stand by his throttle. A moment later Joe left the cab, picked up three heavy sacks, and tossed them into the tender on top of the coal. He climbed back into the engine.

"O. K.!" he shouted.

Larry came back to his old position beside the engineer.

"Joe," he ordered, "keep that big bohunk fireman covered. Plug him if he makes a wrong move." He turned to Plapp. "Get some steam up in this kettle, and get it up quick, savvy?"

The Link kept one eye on Sam and one on the mounting pressure gauge as Plapp sweated over his fire. Suddenly he nudged Sam with his six-gun.

"Let's go!" he snapped. "Back down toward the main line."

"The posse's out by now, but they'll never think of this for a get-away," laughed Matt. He looked at Derby, sprawled semiconscious in a corner of the cab. "What about loud-mouth?" he said.

"Roll him out, ditch him," snapped Larry. "The hell with the drunken bum! We can cut him out of his split."

With an unpleasant laugh, Matt and Joe rolled their confederate off the engine, as Sam, helpless under Larry's gun, threw his lever into reverse and opened the throttle. Fifty-six started with a jerk and a groan that muffled the sickening thud of Derby's body as it struck the roadbed.

IV.

THE ride toward the main line was a nightmare for Sam and Plapp. Fifty-six had no rear headlight. Her taillights, still turned to show red behind and green on either side, had no effect on the darkness through which the engine pounded. Sam's head throbbed. The pain in his wounded leg grew sharp, almost unbearable; but he clung to his throttle, judging his speed, trying to estimate the distance he had already covered.

More than once he hoped that a spread rail or the locomotive's crazy

pace might wreck her and everything. It would be hard for a man who had never wrecked a train in his life to have to go out that way; but it would be harder still to go back and face the disgrace of having had his engine stolen from him, of having been forced to aid in the escape of a gang of bank robbers.

Suppose his story wasn't believed—what then? It was a wild tale, hardly credible, at best. People don't steal locomotives every day.

Dazed, utterly unhappy, Sam looked over toward Plapp. The big Dutchman, stolid, silent as an automaton, was feeding his fire as if he were stoking the furnaces of hell itself. Sam wondered if Plapp felt the disgrace of it all. He wondered if Plapp felt anything.

As a matter of fact, for all the smallness of the bullet head that was set upon his giant shoulders, Suydam was thinking hard. A scheme, nebulous as a wisp of steam at first, was forming.

Matt and Joe had relaxed their vigilance. They watched him still, with their guns handy should he make an overt movement, but they realized that he had to have a certain amount of freedom to work his fire.

THE BIG DUTCHMAN WAS DRAGGING THE TWO BY THEIR COAT COLLARS

Plapp looked at his fire casually. Then he turned to seize a heavy slice bar. Toiling slowly, methodically, he plunged the long piece of iron into the firebox and broke up the clinkers that were forming in the grate. Then, hand over hand, he carefully withdrew the bar.

It was hot. It blistered the skin on his calloused hands, but he didn't mind that. When he had the bar where it balanced neatly in his grip, he pulled it

out suddenly, and, instead of dropping it beside his rake and other tools, he swung it sidewise as swiftly and as hard as he could.

The red-hot end caught Matt and Joe just below the knees. Bellowing with the pain of searing burns, caught completely by surprise, they lost their balance in the rocking cab. Matt tumbled backward into the coal in the tender. Joe stumbled, tried to catch himself, slipped as No. 56 lurched, made a futile grab for the hand rail, and fell clear of the engine.

As Plapp catapulted his whole weight against the prostrate Matt, Larry the Link dashed forward, and his gun blazed. Larry was sure he couldn't miss the broad target of the Dutchman's back; but just as his finger pressed the trigger, Sam Tebbetts clutched at his gun from behind, and the shot went wild.

Larry turned, his face distorted with rage, and grappled with Tebbetts. Sam plunged, football fashion, for the bandit's legs, and Larry crashed to the floor plates.

Unguided, no one at the controls, no one to watch the lowering water level, No. 56 flew on down the tracks, while four men fought and struggled on the floor of her cab. Blows and curses fell thick and fast. No quarter was asked, and none was given.

Plapp held Matt's head in his huge hands and banged it with all his strength against the iron side wall of the tender. Larry's fingers tightened around Sam's throat and held their grip till the nails dug into the flesh and blue knots stood out in the corded veins. Sam gasped and struggled to release the hold. Black spots danced before his eyes. He could barely hear Plapp's voice.

"I'm comin', Shordy! Hold him!"

The next instant Sam heard the sound of something landing heavily on human flesh. Larry groaned, and those ghastly fingers stopped clawing at Sam's throat.

"I got him that time—mit a shovel, Shordy!"

To Sam, as he lay exhausted, his fireman's sturdy Dutch voice sounded like beautiful music. Plapp rolled the inert body of Larry into the coal car.

Then, without warning, the scream of a locomotive whistle rent the night. Weak as he was, Sam scrambled to his feet and jumped for the throttle as he saw the white beam of an engine's headlight bearing down on him.

"Jump, Plapp! Jump!" he shouted. "I'll stick with her!"

Brakes on full, throttle shut, wheels locked and sliding over the rails in a shower of sparks, No. 56 tore recklessly toward the oncoming engine. The glare of the stranger's headlight blinded Sam as he stared at the rapidly lessening length of track between the two locomotives.

He thought of his lights. They were set on the tender for an engine running forward—red behind and green on both sides. Yet here he was, backing down the rails in the face of an approaching train. He wanted to close his eyes to the catastrophe that seemed imminent; but the impending disaster held him spellbound. He couldn't look away from the black bulk of iron rocking toward him behind that blinding white headlight.

Sam heard the stranger groan and jerk as her own brakes were applied, and he summoned the last strength that was in him for a final effort to avert the collision. He threw the lever in the quadrant into forward speed, eased open the throttle, and held one hand ready to release the brakes.

With a wrench that nearly turned her over, No. 56 left the rails. She bumped over the ties and stopped, hissing steam from a myriad opened seams. Sam shut off his throttle. Miraculously the crash didn't come. The stranger ground to a halt less than five yards away.

Dazed, Sam climbed out of his cab and stumbled forward. Men with lanterns were running toward him, shouting. He recognized old man Slawson, the super, erect as a major for all his gray hairs and the years that his shoulders carried. Whitey Evans, a conductor, was walking beside Slawson. Behind them came Jim Dodge, veteran engine driver, and a big man whom Sam didn't know; but he saw the silver badge that glittered on the stranger's vest and the broad gun belt that girdled his waist.

"You dad-blamed idiot!" snapped the super. "What do you mean, taking a locomotive out on this spur? Don't you know the main line yet? Running backward without the proper lights showing, too! You an engineer? Hell, you aren't fit to be a call boy!"

Sam looked about him blankly.

"Yes, sir," he replied weakly.

He was wondering what had happened to Plapp. He hoped the Dutchman hadn't hurt himself much when he jumped.

Slawson turned to the big marshal.

"I don't know just what charges the road 'll press yet," he said; "but you'd better take him in custody." He swung toward Sam. "Do you know you've had the whole road looking for that locomotive all night?"

"Yes, sir," said Sam. His leg was throbbing badly. He didn't think he could stand on it much longer. "Plapp jumped somewhere back there. You'd better find him. Maybe he's hurt."

"What's that?" barked Slawson.

"Hey, Mr. Slawson! Did them burglars switch you onto the spur too?"

Plapp's loud voice turned everybody's attention to No. 56. The big Dutchman swung himself carefully to the ground and started up the tracks, dragging by their coat collars the unconscious Matt in his right hand and the equally comatose Larry in his left hand.

"I got 'em both, Mr. Slawson!" Suydam was smiling from ear to ear. "Me and Shordy done it. There's another hidin' in a car on the highway, and one fell off about six miles back, and Derby Smith is up by Van Horn, in the tunnel, and the gold is in mit the coal in the tender!"

"What?"

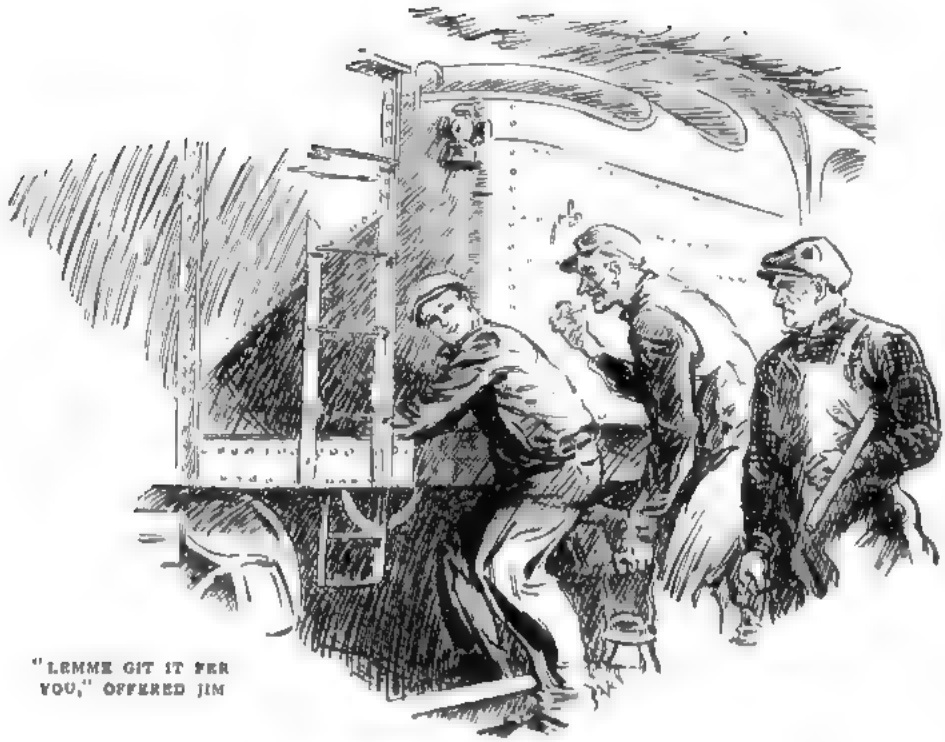
The Dutchman explained all over again. Sam corroborated the story, putting in most of the details.

Sam, the superintendent, and Suydam Plapp walked back toward the special together. Sam limped badly, because his leg hurt; but he didn't mind it so much now. It could be looked after when they reached Nome. Old man Slawson had an arm around Sam's shoulders, and Sam had one of old man Slawson's cigars stuck in his mouth.

The little engineer didn't seem much bigger than the cigar. He took a long puff. His chest expanded. Railroading wasn't so bad when the super was a friend of yours.

"Hey, Plapp!" he said suddenly. "I thought I told you to jump."

"Yeh!" Suydam grinned behind a fragrant Havana that had rested, only a few minutes before, with others in the super's pocket. "I never get off a movin' engine till it comes to a full shtop. Take no chances — ain't that right, Mr. Slawson?"



"LEMME GIT IT FER YOU," OFFERED JIM

Redemption For Slim

It Took Hard Hitters to Make a Man of "Fightin' Bill" McGuire's Over-grown Son

By E. S. Dellinger

THERE seemed no redemption for Slim. He was a dyed-in-the-wool sissy. His mother had so decreed from the day of his birth. His maternal grandfather, a yard master in Kansas City, having been ground to mince-meat under the wheels of a yard engine, and his father, Fightin' Bill McGuire, a freight hoghead out of La Junta, having been scalded to death in a wreck on Raton Mountain the day before Slim's birth, the poor mother was determined that her precious son should never work around a railroad where there was danger. It made her hysterical even to think about it. From infancy she trained and dressed the kid away from the rail. She kept him in long dresses for fifteen months, made him wear a tablecloth collar and a red silk necktie, when he should, by the right of a railroader's son, have been playing engineer and brakeman, and dressed him in knickers until six months before the bank went broke and he had to get out to work.

He had just turned eighteen. He didn't drink, smoke, shoot craps, nor play poker; and he couldn't swear

worth a car-whack's damn. It hadn't been six months since he had had his mouth washed out with soap for saying "gosh-darn." Height and girth almost equal, powdered and perfumed, skin soft and white like a baby's, nose slightly tip-tilted, soft, trusting blue eyes that filled with tears a dozen times a day, hair parted in the middle and plastered down with oil — that was Slim. He didn't know anything, couldn't do anything, not even do as he was told. He had precisely as much business braking on a freight train as a cherub has poking fires in the realms of Satan.

In fact, he never could have got a job braking if it hadn't been for his mother's brother, Ben Shook, who ran a freight train out of Coronado. Slim came out from Kansas City with a note from his mother, asking the uncle to get him a job where there was no danger. That meant an office job. The mother fondly expected that he would immediately be made assistant superintendent or something of the sort; and Slim judged that since he could make exactly fifty-one words a minute on the typewriter, he should be appointed a chief clerk or private secretary. But as soon as Ben Shook looked the kid over, that worthy decided a job braking would just about fit him, might at least teach him that coal smoke isn't poison, nor calloused hands disgraceful, nor healthy tan fatal.

Slim protestingly made a dozen student trips on the north local, out of Coronado, riding the caboose to keep out of all the dirt possible. The train master then sent him out on through freight for a week and, finally, put him on the extra board, where he caught a run now and then when somebody else rested for a trip. Here he drew exactly the same rate of pay as the man who held the job regularly, though he did none of the work. No student is a real brakeman when he first gets on the extra board. The older men have to help him for months before he becomes efficient; but the majority of the men are perfectly willing to help the fellow who is trying to learn the game. Slim knew less than the average; but because he was Ben Shook's nephew, the fellows all shielded him while he was learning the road, and didn't push him forward after he got on the extra board.

Consequently, the new education was going rather slowly until Slim caught a run with Long Jim and Shorty on the south local out of Las Lunas about the first of August. Take a skeleton, stretch some desert-baked hide tightly over it, put a pair of lazy gray eyes in the sockets, drape pepper-and-salt vest and trousers and a black sateen shirt over the frame, hang a rusty, skeleton frame lantern on the right arm, and let an old, half burned corncob pipe hang from the mouth by its stem, open and down, and you have Long Jim Little.

Long Jim wore the conductor's badge, drew the conductor's pay check, and signed the conductor's orders—when his hind brakeman, Black Cantrell, didn't sign them for him. But it was Shorty O'Reilly who really handled the work on the south local. Shorty was squat, redheaded, freckled, and all Irish. He told Long Jim whether they would head the local into the siding for a freight train behind them, or make the freight wait until they got their switching done and follow them out of town; told coal operators whether they could have empty coal cars to-day or wait until next week; cussed the station agent when there was switching to do or freight to

be loaded; and educated green brakemen until they heartily wished they were in the next world.

Shorty knew his job, but he was hard. He had been cast in the furnace that makes men hard. He had shuffled cars on the hump at Laramie, scooped coal over Raton Mountain, run a train on the S. O. and G., and been assistant night yard master at Pocatello. He had been hard when Slim's doting mamma had been chaining up that youngster's three-cornered pants with safety pins for suspenders. He knew he was hard; and he wanted everybody else to know it; wanted to be thought harder than he really was.

These two, with Black Cantrell and Whitey Larson, the head brakeman, who don't count in this story, made up the crew of the south local.

It was high dawn. Red, yellow, and green switch lights toward the south end of the Las Lunas yards, battled bravely with the newborn day. Long Jim and Shorty stood by the first empty coal car of their train, watching the coal-destroying junk pile, labeled 2778, come floating toward them.

"Larson's layin' off this trip," remarked Shorty, stepping on the cigarette stub which he tossed to the ground.

"Wonder who we're gittin' in 'is place," drawled Jim sleepily.

"Don't know an' don't care," growled Shorty. "These hay-burnin' students is all alike. Every year they're gittin' a little worse. I guess—well, fer cripes sake, this 'un's big enough!"

II

Shorty burst out laughing as the blocky figure of Slim loomed up on the rear end of the tender, his white light leaning against his stomach while he held on the grab iron with both hands. Long Jim gave an easy sign at exactly the right moment, so the engineer could bring the 2778 back for a noiseless coupling. Slim waddled off the tender, set down his lantern and squeezed in behind the engine to couple the air hose. For three minutes he twisted and squirmed and grunted, trying to get the couplings together. Shorty gave an angry snort.

"Lemme git it fer you, kid," offered Jim, hearing in that one snort the starting gun of trouble for the kid.

That day was a tragedy of errors for poor Slim. When Shorty expected him on the ground, he was on top of the train; when Shorty wanted him at the rear end, he stayed with the engine; when Shorty handed him an easy sign, he passed a washout to the hoghead. Every time Slim made a blunder, Shorty would hunt him out, glower brutally up into his face, and describe his ancestry clear back into the fifth day; and every time Shorty bawled him out he stuffed chubby fists into his eyes and cried like a baby. But in that day, with all its tragedy, began Slim's redemption.

Over at Cokedale they had some empty coal cars to pick up and take with them. Shorty wanted to put them back about the middle of the train. He told the kid how many cars to cut off, and he went across to the house track to let off the brakes. Slim cut off one car too many, pulled them up over the switch, and started backing in with them. He kept giving washout back-up signs until the string of twenty cars came within forty feet of the cut upon which Shorty was working—never warned the engineer to slow down. Then he gave a stop sign; but all the air brakes in the country couldn't keep them from hitting like a meteor.

Shorty, busy letting off brakes, had given the boy credit for at least knowing how to couple two cuts of cars. He was not ready for the shock, and when the cars hit, his feet flew out from under him. The lunge of the cars sent him plowing along on his face, his knees, his stomach, picking splinters from rough oaken boards. He lost eight square inches of hide and tore the entire knee out of a brand-new pair of three-dollar unionalls.

Shorty didn't finish letting off brakes, not then. He made straight for the spot where Slim was laboring with the air hose coupler. He was talking to himself as he went, but he changed his remarks to Slim.

"What the hell you tryin' to do around here, you blank blank blankety blank? You want to kill a honest man an' smash up a million dollars' worth o' property. I'll make you wish you'd—"

He came with both fists doubled up straight at Slim's face, his teeth showing like those of an angry terrier. Slim turned pale and began backing up, holding both arms crossed to ward off the blows.

But Shorty didn't get to him. Fortunately Long Jim, having finished taking numbers on the last car of the cut, was on the opposite side of the car from his two brakemen. Hearing Shorty, and guessing what had happened, he crawled through between the cars in time to prevent actual violence.

"Now, Shorty! Now, Shorty!" he cooed. "You don't want to do nothin' like that. He's jist a kid. He—"

"Jist a kid—jist a kid, is it? Then I'll larn him to stay home an' play horse with a stick what won't hurt nobody. That's—"

"Now, Shorty, you jist run right on back to the caboose. Me an' the kid 'll pick up the rest of these here cars an' put 'em on the train. You run on back there an' rest. You're hot."

Shorty was indeed hot. What's more, he didn't cool off soon.

It was well past noon. Pungent odor of piñon and scrub cedar squeezed out of shriveled foliage by the burning midday sun of central New Mexico filled the air and penetrated the nostrils. The local freight, consisting by this time of the red caboose and three cars of short merchandise behind, the 2778 and four loads of coal ahead, and a quarter mile of empty coal cars strung out between, wheezed slowly up toward the top of Moreno Pass. Slim, his overalls dirty, his baby face smudged with tears and coal smoke, rolled out the gangway of the engine as it clanked over the switch frog and stood waiting for ten cars to creep noisily by him.

Twenty-five car lengths away, Long Jim and Shorty, brake clubs in hand, came dragging themselves through the sweltering heat. Shorty was still hot. His face and hands pained him, and he was still talking.

"Any derned, square-headed, white-livered imbecile that calls hisself a man," he raved, "ought to be put in the insane asylum an' clapped into the padded cell for rawhidin' around a local with a gang o' decorated, possum-bosomed, brass-liveried, gold-washed students like we got drawin' pay here on this mountain."

Long Jim didn't answer. Instead, clamping the cob pipe between his teeth, he turned away from the train and led off to the right toward the Number Two Mine Track across a patch of sunflowers, which, rising out of soap weeds and cactus, stood wilting in the sun. There six black gondolas

stood, loaded with coal, all ready to be switched out. They had to pick up the six loads and set in six empties.

Shorty raved on: "We ought to run every blasted one of 'em off the job the very day they show up an' try to draw pay for lettin' us fellers git out an' do their work. They're dangerous. Jim, they're dangerous. That's the third time today this damned infantile fool's tried to kill me."

WITH A YELP HE TOOK THE AIR

"But we got to have 'em, Shorty. We got to have 'em," soothed Jim. "Why, how would railroadin' ever git done if old heads like you didn't teach it to 'em before you all die off or git too old to work, or—"

"How? How?" broke in Shorty. "You work on this division an' ask me how? You couple a air hose fer a big hunk of a cryin' infernal—"

There was an angry b-r-r-r-r-r in the sunflowers ahead. It sounded like the shuffling of dry grass in the wind. The long conductor shot backward into the stomach of his Irish partner almost upsetting him in the path.

"What the—what the hell?" he stammered slowly.

Then recovering his brake club, which he had dropped in the moment of excitement, he started forward again, this time peering cautiously among the sunflowers. The angry "b-r-r-r-r-r" came again. And again Long Jim jumped; but he didn't retreat so far nor so hastily. He remained to locate the angry reptile and let fly his club straight at its coil. The rattler sprang to meet the club, then dropped back and lay twitching and writhing among the sunflower leaves. Jim picked up a rock as big as a tomato can, and was on the point of letting

drive to finish the snake when Shorty grabbed his hand.

Long Jim turned on his brakeman in amazement. Shorty's face was covered from ear to ear with a joyous grin —the first grin Jim had seen there since daylight.

"Wait a minute, cap," the swing brakeman urged purringly. "Stay thy hand, oh, executioner! I've jist aborted a' idea. That's one spotted poison-shooter that's goin' to be put to a useful purpose."

Chuckling gleefully, he brushed past the conductor and stood watching the snake. It was an ordinary black-and-brown, diamond specked prairie rattler, about eighteen inches long, with half a dozen rattles on its tail. But Shorty O'Reilly gave a grunt of satisfaction as he slipped the end of his club softly down upon the writhing body about three inches behind the head.

As the club bore down more heavily upon the stunned snake, it revived and tried to wriggle itself free from the pressure; but the more it squirmed the harder Shorty pushed. It licked out its evil tongue angrily, and thumped the ground helplessly with its tail; but it couldn't get away. By and by Shorty slipped a gauntleted right hand down, and catching it just behind the head, released his club. The angry, gyrating tail shot into a coil about his arm, but he grabbed it with his left hand, and holding the squirming, twisting, twitching body ahead of him, started hurriedly toward the string of loaded gondolas on the mine track.

"What the devil's eatin' on you today, Shorty?" questioned Long Jim, stopping to pick up Shorty's club. "Has the heat an' the rawhidin' on this local went to your head?"

Shorty was too busy watching the live rattlesnake to look around, but as he hurried on he chuckled back over his shoulder:

"Keep yer pants on, you old whopper-jawed, pencil-pushin' refrigerator. Keep yer pants on an' watch me. This is one worthless rattler that's got a high an' mighty job ahead of 'im. When I git through with 'im I'm goin' to give 'im a pair o' angel wings an' send 'im home to glory. You watch *me*."

By this time Slim had cut off the train behind the tenth empty coal car, and, leaving the rear end of the train standing on the main line, had pulled up over the switch and backed into the mine track. Here he coupled into the six loads of coal, but he didn't go back to let off hand brakes. He didn't know he ought to, and besides he was afraid of Shorty.

Instead of that he went forward to the engine and sat down on a rail of Number One track. Shorty, spotting the kid on the rail, hurried around to the opposite side of the train and tried to get up the ladder of the third coal car, but he had a problem. To turn loose the head end of that rattler was out of the question; to turn loose of its rickety, rackety caboose would let it coil itself about his arm.

"Hey, Jim!" he called softly. "Come here an' hold this varmint a minute till I git up on this derned coal wagon."

"To hell with you, you sawed-off, red-headed, freckle-faced son o' Tipperary—you an' your snake, too," drawled the conductor as he sauntered up and stood with his hands in his pockets watching. "If you never git on top o' that car o' coal till I hold your angel pet fer you you'll be still standin' here by the track when hell's froze over. I wouldn't pick up that rat-

tlin' sidewinder fer all the money in—"

"Git out o' here. Go on wi' your writin', but don't be too danged swift about it."

III.

SHORTY studied the grab irons on the side of the car for a moment, then lifting both hands above his head, and holding the right above the left, he went scrambling up the side. Right over left, left over right, stretching the snake to reach from one grab iron to the other. Right over left—"Ouch, you damned varmint!" he muttered, his face coming almost within reach of the closely held head. He almost lost his hold, but he kept on until he found footing in the lumps of coal.

He looked over toward the head end. Slim still sat on the rail

Shorty squatted down by the brake wheel, where he sat holding the snake, and puckering his mouth into a whistle. Then he squirmed around, trying to get a hand into a jumper pocket. Finally he called to the conductor:

"Hey, Jim! Come here a minute."

"Well, what do you want now?" inquired the conductor, climbing lazily up the side of the car of coal.

"Run your hand into my right jumper pocket an' give me that piece o' string. I need it in my biz."

Jim did as he was directed. Then what was expected to pass for a grin wrinkled his dried up visage. Shorty was wrapping the tail and body of the prairie rattler around the base of the upright brake wheel staff, and with the string firmly tying the head to the staff so it couldn't get away. There lay the rattler, rattling and licking out its tongue in fury. Shorty watched until he seemed satisfied with his job, then hurried off to release his brakes.

As soon as he had released the last one, he tossed up his right hand—signal to go ahead. Slim picked up the signal and yelled to the engineer. The 2778 wheezed and coughed; the wheels spun around, gripped the rail and moved up the track. Slim caught the engine as it went by him, and climbing through the gangway, rode out to the switch. Shorty rode the last empty ahead of the loads. Long Jim walked back through the sunflowers.

As the engine went over the switch, Slim saw Shorty making a signal. He was whirling his hand around and around like a cowboy twirling a lariat.

"He wants you to drop off here an' throw that switch, you damned idiot," called the engineer contemptuously.

Slim dropped off at the switch and turned a somersault where he landed. He had himself picked up by the time Shorty came riding by, and was standing by watching the cars thump out.

"Ride this bunch back an' stop 'em," yelled Shorty from behind a cupped hand as he went by the switch. "Now you'll have to git a move on or they'll tear hell out o' things."

As soon as the last car had cleared, Slim gave a stop sign, set the switch for the main track and climbed the coal car, club in hand. Before he had time to get up the ladder, Shorty had jerked the coupling lever, and with a click of drawheads, the cars were drifting back from the engine.

The trustful Slim set the brake on the first car. The string was picking up speed. For the first time to-day he got in a hurry and fairly hurled his waddling body toward the second. He clubbed it down and made for the third. As he was in the act of stooping over the wheel to insert the club, he heard a "br-r-r-r-r," mingled with the roar and thump of the cars. He

started a little. There was nothing in sight. He caught one glimpse of passing fence posts. Though the cars were not going more than six miles an hour, he thought they were going twenty. He made another dive for the brake wheel. The warning "Br-r-r" came again. Glancing down, he caught sight of the live rattlesnake wagging its evil head not two feet from his leg

Slim let out a yelp and dropped his club. He made two jumps toward the middle of the car, then seeing that the cars he was riding were going to crash into the string of empties not two car-lengths away, he let out another yelp, and flopping both arms up and down like the wings of a wild goose, he took the air.

As he cleared the passing track and hit the steep embankment rolling, the six carloads of coal tied into the string of still empties, with the crash and thunder of a mighty explosion. Slim yelled again, and gathering himself together, tried to leap the four-foot fence. His overalls caught in the barbed wire and he sprawled out in a bed of cactus.

He gave one terror-stricken glance backward to see how many cars were chasing him off the right of way. The cars were all upright. Black dust was rising from the tops of the loads, stirred up by the impact. Slim gave a sob of relief. Great tears coursed down his sooty cheeks. As the engineer called in the flag, he made his way shamefacedly back to the engine. On the way he met Shorty O'Reilly grinning from ear to ear.

As he pondered over the affair, recalled Shorty's haste out of sight behind the cut of cars when he went to let off brakes, remembered how Shorty had ordered him to set the brakes on the cars, remembered even, now he was no longer frightened, that there was a string around the neck of that snake, he knew he had been tricked. And it made him weep.

When he got into Lobo that trip he met his uncle, and blubberingly told the old railroader about his disgraceful treatment at the hands of Shorty, and about his ignominious flight from a chained rattler, and showed his bruises and cuts to prove that he had been mistreated. He didn't know exactly what he expected his uncle to do; but he had always been accustomed to go to his mamma when he had been mistreated. She would immediately settle the score with his tormentors, especially if he wept when he went for sympathy.

If he expected his uncle to do likewise, he was disappointed. Ben Shook's stout waistline rose and fell in convulsive ripples, and the bronzed throat tightened around many a suppressed gurgle as the boy told his tale; but the face was straight when he asked the simple question:

"What did you do about it?"

"I—I didn't do nothin'," blubbered Slim.

"Do you know what I'd 'a' done, kid?"

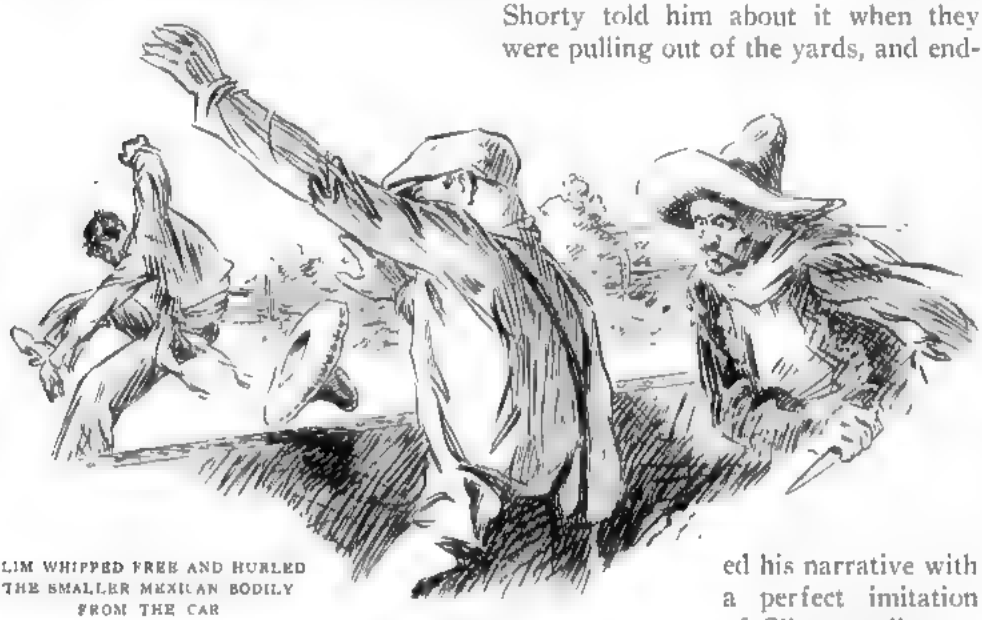
Slim shook his head.

"I'd 'a' whipped hell out o' that little Irish runt. I'd 'a' made him eat that rattler blood raw. You're as big as two of 'im. Let a runt like him play a prank on you an' git away with it—" Ben gave a snort of disgust and turned away from his nephew.

It angered Slim beyond measure to think that he had failed to find sympathy with his mother's brother—the man who, his mother had told him, would protect him against all evil. But he felt that somehow the insult must be avenged. If his uncle wouldn't settle with Shorty O'Reilly, then it was

up to him to do something about it. He had seen a few fist fights in his sheltered life, though he had never been in one. Somehow the more he thought about his uncle's suggestion, the more it appealed to him.

On the return trip next morning,



SLIM WHIPPED FREE AND HURLED THE SMALLER MEXICAN BODILY FROM THE CAR

Shorty was by himself standing at the head car when Slim brought out the engine. When Slim started to make the coupling, he set the knuckle off a few degrees and the engine didn't couple.

"You're one hell of a brakeman," stormed Shorty. "By God, you'd better go home an' ask your mamma for a bottle with a nipple on it. You—"

Slim turned around and blinked angrily at Shorty, then he folded up his chubby fist, and trying to make his fat face look as fierce as Shorty's freckled one, advanced slowly upon the older brakeman, pouring out stuff that was expected to pass for profanity as he came. Shorty, startled in the middle of his tirade, made haste to defend himself.

There were just two licks hit in that fight. Shorty hit Slim, and Slim hit the ground. When he came up his nose was bleeding and he had both chubby hands stuffed into his eyes. He was crying like a baby.

Long Jim didn't see the fight, but Shorty told him about it when they were pulling out of the yards, and ended his narrative with a perfect imitation of Slim standing up with both fists stuffed into his leaking optics.

Long Jim's kind face wore a pained look as he stood there on the rear platform of the caboose, removed his empty pipe, filled and lighted it, and stuck it right side up in his mouth.

"I used to know old Bill McGuire when he was runnin' on the north end out o' Raton, Shorty. I was brakin' over the hill when he was killed. If that kid's anything like his dad—"

"You don't aim to tell me that kid's old Bill McGuire's boy," broke in Shorty.

"Shore is," drawled Jim.

Shorty let his right thumb pass slowly over a knot on his fifth right rib, and then passed his hands softly over a couple of gold front teeth.

"Fightin' Bill McGuire's kid—Fightin' Bill McGuire's kid—an' start cryin' the first time he gits socked in the mug," mused Shorty sadly. "Some mistake in fambly history, Jim. Bill McGuire's kid wouldn't do *that*."

But the error wasn't in Slim's family history. It was in Shorty's psychology. Before Slim's nose had quit bleeding, even before the arid breeze had dried the salt tears out of his blue eyes, the sissy had become obsessed with one idea—"to whip hell" out of Shorty O'Reilly—to make him eat a rattler blood raw. But angry as he was, his swelling nose told him the time was not now. He suddenly awoke to the fact that he had a lot to learn before he went seeking revenge. But *Little Willie* McGuire had become in a moment the son of Fightin' Bill.

IV

SLIM didn't tell his uncle about the fight. Instead, he bought two punching bags and hung them in his room. Here every trip for five months he spent hours striking, punching, dodging; and every time he struck, every time a bag caught him in the face, he imagined himself in conflict with Shorty O'Reilly. His waistline reduced. His flabby shoulder muscles became firm and hard as steel. Instead of standing before the looking-glass, now, with powder puff and hair oil bottle, he stood there with clenched fists and squared jaw, practicing certain distortions, trying to make his face look fierce as that of the renowned Shorty. And he was succeeding.

The clear skin had become tanned and brown; the blue eyes had changed from watery to steely; and he didn't cry now when he mashed his finger or bumped his head. Instead he used the conjunction *damn* to couple name of deity with that of canine progeny, hurled the whole at the thing that had hurt him, and went right on with his work. He wanted to learn the work, because he wanted to hold the job until he could get even with Shorty; and he found the men willing to teach him. He could couple an air hose with one twist of the wrists; could set the knuckles of two couplers so they would catch and never miss, could twist a brake with his hand till it took a man with a club to release it. Slim was becoming a brakeman.

Shorty having told the call boy never to put that "dough-eatin', tear-spillin' infant" out on the local again, Slim didn't catch another run with Shorty until about Christmas. He was tickled until his toes wiggled when he learned he was getting out at last with his old enemy. Vengeance was to be his at last. He was sure he wouldn't be out with Shorty thirty minutes until that Irish runt would make a crack to give him excuse for starting a fight. He was equally sure that, after having taken all the exercises he had, he could clean Shorty's pan; and he was glad.

Arrived at the yard office at 5 A.M., he met a disappointment. It was Black Cantrell, the hind brakeman, who was laying off this trip; and since, according to custom on the mountain local, the extra brakeman always worked the job of the man laying off, Slim found he had to work the rear end. It was his job to flag—to keep trains coming behind from hitting his train when it was stopped on the main line. He didn't have any work to do on the train at all, unless they were in siding. He had to stay behind. He had no chance at all to work with Shorty; and Shorty was a very pleasant buddy to ride with in the cupola. In fact, Slim had to fight a rapidly growing inclination to

like the hard-boiled fire eater. But whenever he felt that inclination coming, he fought it back, determined to give Shorty one good licking.

Of course he couldn't just walk up to the little Irishman and say:

"Pull off your coat, damn yu. I'm goin' to lick hell out of yu."

He had to wait until Shorty gave him a chance; and it seemed as if the chance were not coming this trip.

It was past noon. The local had reached Carbon—scene of the snake affair. There was always a long switch list at Carbon. There were five mine tracks west of the main line, and to the east, a passing track a half mile long connecting with the main track at both ends, and another spur track leading off to the east from the passing track. Shorty had to put five empty flat-bottomed coal cars off his train into this spur track after taking four loads from the track, had to set them in there behind two merchandise cars already there; but he wanted to switch the mine spurs first. He took the five empty cars out with him when he took the engine off the train, pulled them up clear of the upper, or south passing track switch, intending to let them be cut off and roll down the passing track below the spur switch.

Catching the eye of his helper, Whitey Larson, he slapped his hands together five times—signal to cut off five cars, then held up two fingers of his right hand—signal for Whitey to take the engine and some more empty cars back into Number Two mine track. Whitey answered both signals. Shorty threw the switch and the cars came rolling back.

The road having been built on a rather heavy grade at this place, Shorty had to ride the cars and set brakes on them. He caught the first one; but he didn't climb into it for some little distance, waiting, instead, for the cars to gain headway before setting brakes. When he did climb in he met what would have been a surprise to some men. (Shorty himself had never had a surprise.) Four Mexicans were crouched in one corner of the car, stealing a ride.

There were only two things in the world Shorty despised worse than a student brakeman — the first was a bum, the second a Mexican. When he found these two hated characters combined into one in the form of the Mexican hoboes—knew that they had ridden his train without his knowledge—he was furious.

"Git tu hell out o' here, you dirty, lousy, scurvy-necked, chili-eatin' greasers," he yelled, waving his club. "Git off this train before I throw you off!"

Forgetting for the moment that he was kicking these cars out of his train, that he had brakes to set, he made straight for the four cowering forms. One of the *hombres,* shedding his blanket, came up with a six-inch dirk in his hand. Instantly the other three sprang to their feet to back him up. With measured step Shorty advanced. The one with the knife, watching closely, drew back his hand. Shorty paused a split second, then hurled his club straight at the hand with the knife. That was Shorty's mistake. Club met knife in mid-air. There was the ring of steel. The club flew out over the side of the car. The knife fell down into the refuse coal on the floor and was buried.

Neither Whitey, taking the engine into Number Two mine track, nor Long Jim, grabbing numbers of the cars he was to get out of that track, knew Shorty was in trouble until it was too late to help him.

But Slim, knowing a freight train was to follow the local up the hill, had set some brakes on the rear end and taken his flagging station fifty yards below the north passing track switch. From here he saw the string of empty coal cars shoot out from behind the caboose and come tearing down toward the switch faster than any car should be moving in a side track. He didn't know there was any one on the cars, supposed Shorty had made a mistake somewhere or had failed to get them as they came by him. Knowing that the cars would tear up the switch if they came through it set for the main line, he made a dash to set it right for the approaching cars. By the time he got it unlocked and set, the cars were upon him.

He knew his duty was to catch the cars and stop them. But they were moving rapidly. He had never caught a car going half as fast. He hesitated for an instant, for if he should try to grab them and miss his footing, he would in all probability be carried home in a cracker box. His face blanched; but in the same instant his jaw squared, and as the first car shot by him, he grabbed at it. His right hand missed; his left caught, but the onward rush of the cars swung him loose, hurled him against the side of the car, which sent him sprawling to the ballast. As he went down he heard the voice of Shorty, storming, angry; heard other voices speaking in a lingo he didn't understand. Coming quickly to his feet, he was by the track as the fourth car passed him. He ran for a few steps beside it; grabbed the ladder with both hands; caught; held. He swung like a pendulum forward past the opening between the cars, then far back by the side of the car.

As yet he wasn't worrying about Shorty. His mind was on stopping the runaway cars. Fortunately for him and the company the brakes on cars four and three were toward the same coupling, and both good. He leaped to the first brake wheel, twisted it up barehanded so tightly it almost skidded the wheels; then kicking the dog in place to hold it, swung with one step across the coupler to the next one. In a moment he had two good brakes grinding and rattling. The brake on the second car was on the end next to him. He hurried to set it. Already the five cars were slowing down.

As he came out of the second car and up over the coupler between cars two and one, ready to set the brake on the car the men were in, he saw a sight that made him forget to set that brake —forget the freight train down the hill —forget everything except Shorty O'Reilly. Down on the floor of the car, three Mexicans, tousled, bruised, bleeding, were upon the little Irishman, pounding, kicking, beating him into a pulp. Shorty was doing his best. His arms were flying out like the blades of an airplane propeller, his feet keeping time.

But ten feet from him, and directly between himself and them, the fourth *hombre,* his face hideous with passion, had dug the knife out of the coal dust and was running toward the man who was down. One lick with that knife and Shorty O'Reilly would have fought his last fight.

Slim forgot about the score he had to settle with Shorty. He left the brake unset, and hurled himself into the car straight at the man with the knife.

With a startled exclamation the latter whirled about and gripped the dirk. Slim didn't give him a chance to throw it. He came straight on, his right fist shooting forward like a sledge

hammer. Knife met fist. It ripped skin and flesh from wrist to elbow, checking him in his mad rush. For just an instant the sting paralyzed him, nauseated him, caused him to lose his grip on himself. In that instant the Mexican was again upon him, white teeth bared in a snarl rage, knife dripping red. Once more Slim came into action. His sound left arm came up. The Mexican's head snapped sidewise, the knife left his hand, and he sprawled a heap of senseless carrion upon the floor.

By this time the three men who had been pounding Shorty awoke to realization of their danger. One of them stayed with Shorty, who had almost ceased to struggle. The other two, crouching, watching, came toward Slim. He lacked experience. Besides the one remaining Mex was rapidly pounding Shorty into insensibility. He didn't take time to be cautious; but lunged with all his strength upon the larger of the two opponents. As he swept toward the one Mexican, the other left his feet and threw both arms about Slim's neck from behind. He struck the man in front of him, left, right, left, right—slinging blood from his half paralyzed arm and hand upon the black hair. Then he shook himself like a dog, trying to hurl the one off his neck. The latter was getting a throttle hold. With a backward grip of his powerful hand he seized the little man by the hair and dashed him upon the floor. By this time the other was again upon him, and the third had left Shorty to join in the attack.

Through dimming senses Slim realized that the cars were stopped dead still, heard the freight train whistle out a flag and chug to a stop a few car lengths away.

Around and around the men fought. As fast as he would knock one away, the other would close in upon him. Shorty was twisting and squirming, but seemed unable to get up. Finally the two got to Slim at once. He couldn't shake them loose. Then he felt his feet gripped by the third, felt himself being toppled over upon the floor. As the three of them went down, he once more twisted himself free, and while his antagonists were scrambling around, picked up the smaller one and hurled him bodily from the car.

As he swung back to get another, he felt a sting behind his left shoulder, knew a knife had struck him once more, this time in the back. In a rage he lashed out at the man in front of him, knocked him into a heap, felt himself dazedly following. For just an instant consciousness left him. With its return he saw the flash of a knife above his throat, gasped, threw up his arms to ward off the blow. But the blow never fell. Shorty O'Reilly recovering his senses, had again entered the fray. From behind he gripped the hand with the knife, swung its owner about, and with one last blow upon the temple, laid the dusky *hombre* into the coal dust.

When the engine crew of the freight came over to investigate the five empty cars standing on the main line without a flag, they saw Slim McGuire and Shorty O'Reilly standing like conquerors of old, viewing the vanquished enemy. They even heard Shorty, the boomer, say to Slim, the sissy, as he struck out a battered hand:

"Shake, kid! Yer the son of yer father. Yer shore old Fightin' Bill's own boy. Makes me think o' the time him an' me cleaned six o' the *hombres* over on Raton Mountain twenty year ago."

And Slim shook.

THE BROADWAY LIMITED SNAPPED FROM THE AIR NEAR HARRISBURG

Highballing the Broadway

Clockwork Precision on the Part of Men and Machinery Marks Daily Battle Against Fleeting Time

By William Edward Hayes

Editor, Railroad Man's Magazine

IT was back in a day, some few years ago, when the railroads of the East were making a stronger and stronger play for through passenger traffic; were cutting time and advertising to beat the band in magazines and newspapers, and by calendar and card, that the writer sat on a baggage truck in the shadow of the train shed by the passenger station at a Western division point and listened to a senior locomotive engineer unfold a marvelous tale. The scene was Livingston, Montana. The time was evening.

"You fellers think we do railroadin'," said this veteran. "Say, I wanna tell *you!* Maybe we got the Rocky Mountains, an' maybe we got mean grades, but I ain't ever gonna forget that there ride I took on the Broadway—that hot shot runnin' outta New York to Chicago—scoopin' water, and hittin' her up so danged fast—well!"

The old bird took out his pipe, stuffed in some cut plug, and lighted it He had just come back from his first travel out of the mountain country. He had been on leave for thirty days, and had pulled out from the home

place to take a rest after a good many years of riding up on the right-hand side of this Western railroad's right of way.

As I remember it, there were six of us, and we settled down to hear about the things this veteran had seen. I shall never forget how I drank in the yarn he spun. He told of four tracks of main line, and high speed schedules which it would have been suicide to try out on our mountain streak. I had heard of the Broadway Limited and the Twentieth Century. To us in the Far West these were something to wonder about.

Some day, I decided after the veteran had finished, maybe I would see one of these varnished shots plowing through the twilight. I might even take a trip on one; and if I know anything about the brethren of the rail, there wasn't one of those six who didn't have about the same shade of feeling. In fact, as I remember it, I told myself that I would some day

THE EDITOR WITH THE CREW OF THE ELECTRIC ENGINE ENGINEER FEENEY, CENTER, AND HELPER M. OLESNOVITCH, RIGHT

highball through the atmosphere just as fast as anybody would wheel them, and get a first-hand taste of this twenty-hour schedule stuff

The promise was fulfilled, and somewhat beyond what I at that time had dreamed of. The fulfillment came in the cab of an electric jack out of the train shed of the Pennsylvania Station, for a starter, and continued in the cab of the steam locomotive that whips the run westward from Manhattan Transfer to Harrisburg, just this side of the Alleghanies.

My chief regret, as I chronicle this, is that the veteran who held me spellbound back there in Livingston isn't in this vale of tears to-day to listen to my story.

From the point of view of the railroad man, this chronicler's battered hat is off to the passenger department of the Pennsylvania Railroad. Through clever and persistent advertising the Broadway Limited, extra fare, extra swell, and extra speedy, has taken its place among the railroad institutions of the world. The operation of the train is something to marvel at. Clocklike precision of men and machinery, blended into a perfectly coördinated whole, makes it possible to roll out of New York at three o'clock in the afternoon and pull to a stop in Chicago just twenty hours later, on a schedule that puts the test of fire to nerve and wits over almost a thousand miles of main line.

But to go behind the scenes—to take a peep at a side of highball passenger operation which the man who pays his extra fare has never seen, and never knows about—

II.

"Now you take that engine, there. She'll do just about anything with a heavy passenger train that you can expect out of steam."

It was Engineer Feeney speaking, as we looked over the juice engine on the head end of the nine Pullmans and observation which made up train No. 29, the Broadway, in the Pennsylvania Station shed.

"I want you to take particular notice how easy she starts," Feeney went on, while I nosed around the cab, looking over strange fixtures. "No waste motion. We shoot out of here at three and we're due to stop at Manhattan Transfer at three twelve. We'll make it, easy; but we have to step on it once we get her through the tunnel."

Engineer Feeney was kept busy answering a lot of questions as to this thing and that, because it was my first time in the cab of an electric locomotive, and no kid at a circus could have been more excited. Feeney went on with his explanations, talking of tractive effort, speed qualities, and the future of electrified lines.

"Some day there won't be any steam in this part of the country," he said, as I fingered familiarly the only thing in the cab that I recognized, the air brake equipment. "We're starting on a big electrification plan that 'll put us on juice all the way to Washington. No steam at all between here and Philadelphia then. They're training the steam men as fast as they can to this type of motive power."

I looked at my watch as I formed a mental picture of the electrical age, and wondered how some of the old-timers who'd been raised on steam and smoke would take to it. The dial said 2.59, and faintly the conductor's cry of "All aboard!" rumbled along the platform.

"Take hold of her," said Feeney, as I felt of a long brass handle which, on

steam, would have been the throttle. I dropped into Feeney's seat for a second. "You'll get a big kick out of the tunnel. Watch us bat it through there!"

"Much grade?" I asked

"Wait till you see," said Feeney.

"*Peep, peep!*" the little cab whistle screeched, and I got out of Brother Feeney's way.

"Clear!" the fireman called, as the bull's-eye in the signal ahead glowed green.

"Clear!" repeated Feeney.

That big brass handle came back, No. 29 began to roll.

Believe it or not, a steam-bred man gets a lost feeling on one of these engines starting up like that. You miss the *swoosh* from the exhaust, the pulsing of two hundred pounds' pressure smacking into the cylinders, the swish of the cylinder cocks, and the clang of the firedoor.

We swerved on a curve, saw another green light blinking ahead, and then straightened out to the stem, which immediately disappeared into a yawning black hole in the side of the earth.

"Clear!" yelled Feeney.

"Clear!" checked the man on the left-hand side.

"Look out for this one," Feeney called to me. "We're in the tube."

The headlight played along the low roof of the tunnel. By this time, with the incessant line-up of green boards beckoning to us, we were balling the jack. Far ahead the tunnel looked on nearly a level line; then the light played on the roof, and the roof seemed suddenly to dip into the lower regions of the earth.

"We'll be about a hundred feet under," said Feeney, shouting, "when we hit the bottom. Then watch us walk out of it!"

By this time the seat box on the left-hand side was good enough for the traveler, and from that point I bothered the helper with questions.

"When do we start going up?" I yelled over at the eagle-eye.

"When? Right now!" Feeney yelled back. "Watch her climb!"

Now on a steam jack you know when you're climbing, even though the landscape doesn't indicate much of a grade. You know by the way the exhaust sounds in the stack. On these electric engines you're all lost. For instance, the only way I knew we were on the up grade out of that tunnel was that Feeney said so. No slowing of motion, no change of gears, so to speak —just highball

Far ahead was a shot of daylight It whipped dizzily toward us.

"Hold your ears!" called Feeney.

The ears were properly held, and we shot through the glare, which was an air shaft from overhead. We had passed beneath the river. Bang! Another wild dash, and daylight burst around us. We rolled out of the tunnel and clattered over the Jersey meadows.

"Clear on one!" called Feeney, indicating the block ahead.

"Clear on one!" shouted his helper.

"We're stepping on it now," Feeney told me, looking at his watch. "We'll turn her over to the steam men on the scratch."

III.

THAT turning over to the steam men at Manhattan Transfer was something to write home about. I've seen engines changed before, but I've never seen anything like that.

We brought up to a halt at the Transfer platform. Like swipes in a fighter's corner after the round is over, a gang of hands sprang down between

the jack and the baggage car, and I had just gone up to Conductor G. M Stoll when the electric engine was taken away. Forty-eight seconds—gone! Talk about high speed!

Back came the steam engine from the spur to the right of the main iron ing blower cracked, a wide deck with a scoop in the coal beyond the apron; a great jack known in Pennsylvania circles as a K-4, of the 4-6-2 classification, with the figures 5436 in gold on the sides of the cab.

We stopped at 3.12. We got the

WAITING FOR THE HIGHBALL THE EDITOR AT THE "THROTTLE" OF THE ELECTRIC LOCOMOTIVE IN PENNSYLVANIA STATION

ahead, and another gang sprang on her as she coupled up The skipper introduced me to F. E Godshall, the engineer, and Fireman Cover

"We heard about you," said the eagle-eye. "Climb aboard!"

"Lots of luck, and stick to it!" was Conductor Stoll's parting shot

"See you in Harrisburg," I said, and climbed to the deck

It was a swell feeling, back on a piece of machinery I knew something about—a long, lean, high-mounted jack with whining air pumps, a glow-highball and the air signal at 3.15. Godshall set his air reverse and whipped open his throttle, and there came the old familiar, mighty *swoosh*.

There were no train orders—not on these four tracks of main stem. Everybody knew about the Broadway—No. 29—and it was up to everybody to stay out of the way. No. 29 is superior by class and everything else.

The eighty-inch drivers on the big K-4 caught the rails, and Godshall's clever hand saw that she didn't lose her feet. Not a spin! We walked right

away from there, and went swinging down the railroad.

With two hundred and five pounds of steam pushing up against the pops, Cover swung his door on its chain, the scoop banged, the steam hissed from the opened cylinder cocks, and the scenery slipped backward under a shortened stroke on the twenty-eight-inch piston travel. No. 29 was out to do battle with the standard clock

Nothing fussy about this engine, nothing spectacular. Not the biggest power in the world, but fast power—a weight of 260 tons, engine and tank combined, and a tractive effort of 44,500 pounds. Cover had before him a grate area of 69.89 square feet, and within a little more than three hours he would shovel something like eight tons of fuel through that round door in the back head.

In nothing flat, or so it seemed, we were in Newark, halted for our first passenger stop. It was merely a pause, then highball again, and shortly we settled down to the business of getting to Philadelphia on the card.

"We're getting away to a good start," said Godshall when we were on our way again. "It won't be hard unless—"

I knew what he meant—unless something got in the way.

"We should click off about seventy pretty soon?" I ventured in inquiry.

"And how!" said Godshall.

Hanging in the gangway behind the engineer, I saw Elizabeth swing by, a roaring blur. Crash!—that was the station. Bam!—an overpass. Click-a-click!—those were the rail joints under the polished tires. I gauged the speed. Fifty-five beyond Elizabeth in the swing to the open country.

Godshall got her set and then dug down in his seat box, removing his cap.

"You got your goggles, Bill?" he called.

"Right here," I said, fishing them from my pocket.

At the same time he brought out of his seat box an old peakless cap and a pair of wind glasses.

"Better get 'em on!" yelled the eagle-eye. "We're going to town!"

It was a great ride for the next few miles. The position lights above the outside iron gave us a clear block mile after mile.

"Nothing to it!" shouted Godshall above the deafening roar of the exhaust and the clang of the jack. "We've got 'em by the neck!"

And we did have, for a spell; but then came the unexpected.

"Caution," said a board ahead, and engineer and fireman called it back across the cab. Then a red position on the lights. Godshall shut off. Far ahead a train was in the block. We reduced speed to thirty miles, and then to fifteen, under a service application of the air. I watched the hand on the gauge as we slowed to a walk.

"Pretty howdy-do!" said the eagle-eye.

That reduction in speed knocked us off our schedule, and on a card as fast as the Broadway's even a minute is nothing to joke about. I looked back along the red streak of the train. Skipper Stoll's head came out of the side door of the baggage car. We crept along, impatiently, waiting for a break. Then we got it.

We were east of Princeton Junction when they crossed us to the inside westward iron. We picked up a little, swung around the man who had slowed us, ran under reduced speed for another crossover, and then got back on the outside to take up the mad chase. We weren't very long about it.

READY TO LEAVE MANHATTAN TRANSFER WITH THE STEAM JACK HOOKED ON
THE EDITOR IS SHOWN WITH ENGINEER GODSHALL

"We better get a drink," suggested Cover, crossing to the right-hand side

"Right!" called Godshall.

I remembered what that old vet back in Montana had said about scooping water under speed. Now I was to see how they did it

Far ahead a signal board swung down to meet us, and beyond that was a stretch of track tank.

"Boot!" barked the whistle.

"*Ps-ss-s-t!*" hissed the air release

Crossing to the fireman's seat box, I looked back to see the stunt. The air piston had shot the scoop into the tank. A wide spray covered the roadbed.

"*Scoosh!*" The spray hit the roof, and then it hit us. Cover and I didn't need a shower, but we got one. Godshall yanked that throttle wider—gave her all she had.

Almost any man can remember when he used to watch, as a kid, the thundering engines go by, and how it gave him a surge of thrill, heart-high. Well, when we highballed the Trenton platform in a flash, as I hung in the right-hand gangway, I saw an urchin at the end of the platform looking up at us with fascinated eyes. Those eyes told the story of the boy's sensations in the seconds of our swift passage. Then we were gone, trying to make Philadelphia on the advertised.

Another slow stretch, another crossing over.

"Not much luck," said Godshall, and he wasn't grinning about it. He was reading the story of our flight from his watch dial. "We'll leave North Philadelphia late!"

We did. Six minutes late, and the best of the going behind us—best, that is, for making time. Ahead of us lay

grades, something we hadn't encountered between New York and the City of Brotherly Love.

A steam-bred man senses those things. No one has to mention them. We knew we were in for a grueling battle. We knew it in the tunnel at the edge of the yard. We sensed it more deeply on the long, stiff grade beyond. Back there in those Pullmans people had paid an extra fare for extra fast time, and we on the head end knew what the-road demanded.

Cover worked like a Trojan. The coal wasn't anything to brag about—not nearly as good as it usually is on these runs, I was told. All firemen are hard to please on coal, but Cover had hook and rake into it. He kept the gauge on the pin, a fine feather of smoke; but how he did it I'll never know. Godshall handled his valve gear with precision. He didn't beat her too hard, but he had to yank something out of her, because minutes counted now.

High on the grade, seated beneath a highway overpass, sat a man with a pencil and pad.

"Checkin' us on black smoke," said Godshall, looking at the plume.

"No luck to-day!" I yelled back, because it wasn't black.

When the smoke is inky, the division main pins kick on fuel consumption. A fireman isn't using his head, they'll say; but Cover used his noodle—used it more than his back. No one has ever seen a fireman do so much labor with such little effort.

Twilight settled down on us as we topped the rise. Then came the big plunge. I'll say this for Godshall, that he had this ex-hog nurse holding to everything in sight and wondering about the paid customers behind.

Long, swinging curves raced up and by us. Godshall tensed forward, his hand always on the throttle, never even looking at the brake valve. Careening, rocking, pitching in our flying advance, we raced from twilight into night. There was no talk now, no calling back and forth across the cab. There was a toiling fireman lighting up the dark-

CONDUCTOR G. M. STOLL OF THE BROADWAY LIMITED

ness with a swinging fire door; there was a veteran of the first water up on the right-hand side, his keen eyes fixed on the streak of track ahead. There was battle, silent, grim, against lost minutes on a fast card.

We roared through Lancaster as if the city had never been built. High, wide, and handsome we were eating up the main line.

"Yow!" roared Godshall above the thunder.

"What ho?" I called.

"We're getting 'em!" he yelled back. "See that?" He held up his watch to the gauge lights. "Picked up three of 'em!" There was a trace of a grim, conquering smile about his eyes.

Then we smashed the yard limits of Middletown, highballed the station, and cut into the darkness beyond. Grade crossing after grade crossing flashed by. Godshall was busy with throttle and whistle. We were bent on giving that crew west from Harrisburg —the crew that had the first mountain grades to battle—a fair break with the schedule. If we handed 29 to the Altoona men with those six minutes against it, it wouldn't be very lovely, that's all.

In the next few miles Godshall's watch seldom left his hand. He knew every landmark in the dark, knew by curve and trestle and signal bridge just where he should be and at what time; knew by every rail joint's click.

They seemed an eternity, those next few minutes of mad running. Then Godshall was on his feet. The throttle went home, the air bit the wheels. A maze of switch lights rattled behind us, switch points clanked beneath the slowing tires. Now a bare pace, a creep. A dwarf signal dropped at our pilot. We took a curve with a scream from the flanges and eased down to the Harrisburg platform.

"Did it!" shouted Godshall with glee, while I stretched and tried to get the roar out of my ears. "Look there!"

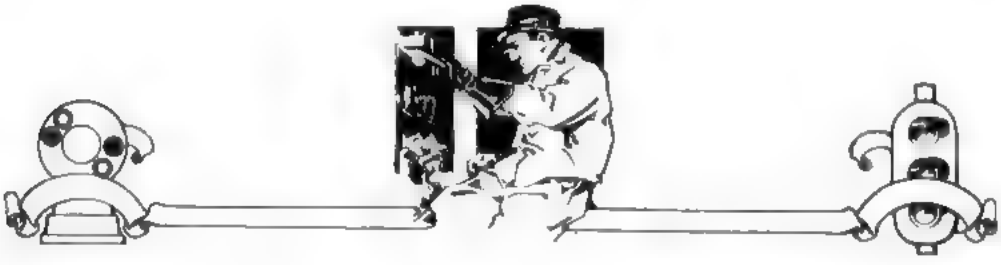
"Six forty-seven," the watch dial read.

"Which means—" I started to say.

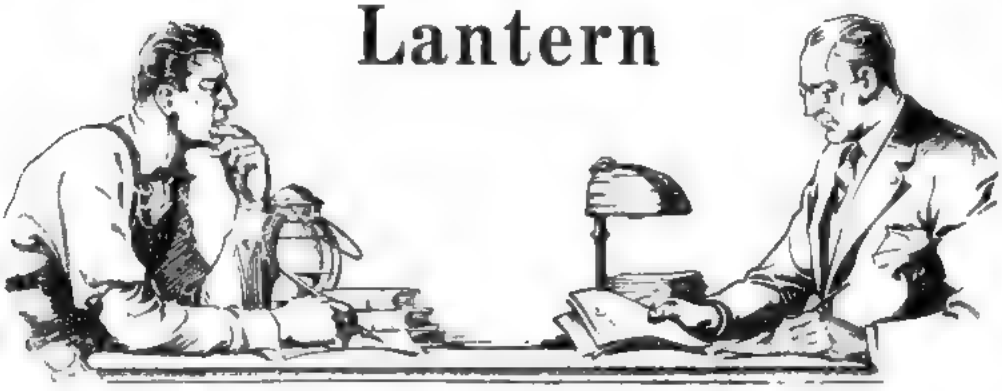
"On the scratch," Godshall finished for me. "The boys hitting the mountains won't have anything to worry about from us!"

A thrilling engine ride for me? More than that a first-class close-up of human nature in the drama of racing against time—in the drama of making good minute by minute that an exacting public might be served.

Railroads point with pride to the men who man these crack shots. Well may they be proud of Godshall, Cover, Stoll, and many, many others like them, highballing the Broadway and the other crack trains of the world.



By the Light of the Lantern



WE want to be as useful as possible to our readers, but, because of the great popularity of this department, we are obliged to impose certain restrictions. It is limited to the answering of questions of an informative, technical, or historical nature only. Letters concerning positions WILL NOT be answered. All letters should be signed with the full name of the writer, as an indication of his good faith. We will print only his initials. The editor begs that readers sending in questions will not be disappointed if the answers do not appear as early as expected. Delays are often unavoidable for two reasons. the magazine is printed two months in advance of the date of issue, and it frequently takes weeks to secure correct answers, owing to the complexity of the questions.

HOW many oil burners are in use on the Southern Pacific?—"Wingo."

The Southern Pacific Lines operate 1537 oil burning locomotives and 148 coal burners

I GOT in an argument with a switchman who claimed he worked for a railroad called the Bay Terminal Company I have asked any number of railroaders, and they have never heard of the outfit. Can you enlighten me?—W B

Maybe this switchman did work for the Bay Terminal. There is a railroad by that name with general offices at Toledo, Ohio It operates about five and a half miles of standard gauge track and owns one locomotive If you will watch closely you will see a tank car now and then with this road's initials; in fact, tank cars comprise the entire freight equipment

A MAIN track runs from A to H eastward At Station C is a junction point where a diverging route joins the main track No 16 is a first class train scheduled to leave A at 7 10 A.M., to arrive at C at 8 10 A.M., and leave at 8.12 A.M. No 18 is a first class train due in from the diverging route at C to arrive at 8.25 and depart at 8.30 over the main route to H No 18 arrives at C on time and is ready to leave on time No 16 is one hour late A to C. Is it permissible for No 18 to run ahead of No 16 on its own schedule from C to H, or should No. 18 take No 16's schedule from C to H and give No 16 the schedule of No. 18 on its arrival at C?—Operator.

The standard rules provide that No 18 goes its way on its own schedule from C to H regardless of No. 16 Because No. 16 is an hour late and therefore behind No. 18, when normally it should be ahead of that train, makes no difference. The division dispatcher, however, could switch the train numbers from C to H if he so desired, but in standard practice there would be no reason for him to make such a move

PLEASE describe the Absolute-Permissive block signal system.—G. H

Absolute-Permissive block system is comprised of distinct stop control signals which extend to a certain point when the train is running in the direction in which the signal governs, and to another point when that train is running in the opposite direction. In other words, the block operates against opposing traffic from siding to siding, and blocks following movements from signal to signal Under most systems of this type there is one stop indication and one caution signal to the rear of every train Under this system of block it is impossible for trains running in opposition to each other to meet between stations Such occurrence is provided against by an "absolute" semaphore at a point beyond each

siding switch. This semaphore is duly marked to distinguish it from the spacing signals between stations, and an overlap is provided in the electrical arrangement so that a train westbound passing Station E would throw the absolute signal beyond the east switch at the siding at D to "stop," and no train is allowed to pass such signal before getting into communication with the dispatcher At the spacing signals between stations, however, the usual rule applies of halting at a red board and then proceeding under control expecting to find the block occupied, a switch open, track broken, or otherwise obstructed

CAN you please tell me something about the Consolidation type of engine, and where such engines are in general use to-day?—Eagle-Eye

The Consolidation type engine was first built in July, 1866, by the Baldwin Locomotive Works, and was named Consolidation. This engine was built for the Lehigh Valley Railroad on plans and specifications furnished by Alexander Mitchell, then the master mechanic of the Mahanoy Division. It was necessary to build a locomotive that would haul a fairly heavy train over the grade which then was known as the Mahanoy Plane and which rose at the rate of one hundred and thirty-three feet per mile. The original Consolidation had cylinders 20x24, four pairs of connected drivers of 48-inch diameter, and a Bissell pony truck in advance of the cylinders and equalized with the front drivers. The engine weighed ninety thousand pounds in working order, eighty thousand pounds of which were on the drivers. There are many engines of this type still in active service. True, the ones now in use are much bigger and more powerful, but they are of the same family and intended for the same heavy freight service.

I HAVE heard of a situation in which a reach-rod had broken on an engine without a driver brake on a long down grade. The fellow who told about it made the most weird explanation of what was to be done that I write to you and ask you what you think about it.—T. E

You do not say what the man who told about a case of this kind explained was the proper thing to be done. So far as we know, there are only two things that can be done if a reach-rod breaks on an engine without a driver brake on a long down grade. The first thing to do is, get out on the running board and try to fish for the links with a clinker hook if the speed is not too great; second, if you can't catch the links, pump her full of water. These things could happen to an engine a good many years ago, but if there are any locomotives in service to-day without a driver brake, we would like to know about them

WHERE did the Mikado type of locomotive get its name and is it the type of engine that is commonly called a "Mike" to-day?—E. J. E.

The engine to which you refer is officially known as a 2-8-2 class. Engines of this type had been built prior to 1902 for the Japan Railway Company, and the name Mikado was adopted for them. This class of engine is popular in heavy freight service throughout the United States to-day, and it is commonly called Mike.

WHAT are the essential parts of the ET Air Brake equipment?—B. L

The essential parts of this equipment are: (1) Air compressor; (2) Main reservoir; (3) Duplex pump governor; (4) Feed valve; (5) Reducing valve; (6) Automatic brake valve with equalizing reservoir; (7) Independent brake valve; (8) Distributing valve and double reservoir; (9) Two duplex air gauges; (10) Combined air strainer and check valve; (11) Choke fitting; (12) Locomotive brake cylinders; also various cocks and fittings. Special parts are sometimes used which are mainly quick action cylinder cap for the distributing valve, a combined air strainer and check valve for the train air signal system, and choke fitting for the truck brake.

HOW many positions has the H-6 brake valve and what are they?—E. T. M.

On the H-6 brake valve there are six positions. Beginning on the left-hand side, the names of these positions are: release, running, holding, lap, service, and emergency.

CAN you tell me the number of electric locomotives in operation around the New York terminals on the Pennsylvania and Long Island Railroads?—C. D

There are, according to our latest information, fifty-two electric locomotives in use around the New York Terminal on the Pennsylvania Railroad, and thirty-three electric locomotives on the Long Island Railroad. There are, however, on the Long Island, more than nine hundred cars electrically equipped, which are used in trains in suburban service The use of these cars, of course, makes a loco-

motive unnecessary, as the cars themselves are equipped with motors

PLEASE give me the approximate mileage and number of engines operated by the Canadian National Railways and the Canadian Pacific Railway. I understand that back in 1912 the Canadian Pacific was considered the longest railroad in the world.—R. H. M.

The Canadian National Railways to-day leads the Canadian Pacific not only in mileage, but also in motive power. The miles of road operated by the Canadian National are 22,538 and 3,076 locomotives. The Canadian Pacific Railroad operates 14,041 miles of main lines and branch-lines and uses 2,255 locomotives to haul its freight and passenger business.

WHAT weight of steam can be evaporated from one pound of water?—J. B.

The weight of steam corresponds exactly to the weight of water from which it came. For instance, this can be proved by taking a vessel and placing therein two pounds of water and sealing it up so that the steam cannot escape. Entirely evaporate the water into steam and you will find that the weight is the same after all the water has been vaporized.

G. A. C.—The proper procedure in an application for a position as locomotive fireman is to see the master mechanic of the division on which you desire the job. In some sections of the country the master mechanic is the man who hires engineers and firemen, while in other localities the proper official to see would be the road foreman of engines or even the traveling engineer. I would advise you to make inquiries at the roundhouse of the roundhouse foreman who will be able to tell you the proper official.

CAN you tell me what the approximate distance covered a second is when a locomotive is pulling a train at 60 miles an hour? At 90 miles an hour?—R. J. M.

A locomotive wheeling a train at 60 miles an hour covers 88 feet in one second, and at 90 miles an hour it covers 132 feet in a second.

WHAT is the automatic steam chest plug?—B. T. T.

It is a plug placed between the tallow pipe and the steam chest on certain types of locomotive and it has within it a choke and a ball valve which when the throttle is open lies to one side, and when the throttle is shut the ball covers the choke with the exception of a small hole through which but a limited amount of oil can pass. This automatic plug has its advantages in the fact that in a dry valve it is possible to pull a wide throttle, unseat the ball and let more oil flow into the chest.

HOW many turns a minute on a 72-inch driving wheel is necessary to make a speed of 30 miles an hour?—T. S.

A driving wheel of this diameter would revolve 140 times a minute to make a thirty mile speed.

I RECENTLY heard a member of a freight train crew referred to as a "Swell-head." At first I thought nothing about it until I heard another freight train crew on another cattle train that I was riding, make the same reference to a member of the outfit. Is there some railroad slang in which this term is used?—F. A.

The term you heard, "Swell-head," was just a nice way the trainmen, perhaps, had of referring to the conductor. There are many slang terms applicable to the conductor and they vary with geography. On another railroad, for instance, you might hear the conductor called "The Big Ox" or "The Brains," or "The Smart Alec," or "The Clown Master."

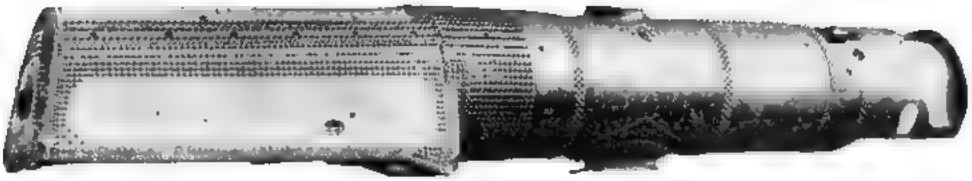
WHAT is the present-day definition of a train?—E. Smoke.

In these days of motor car operation on railroads, the old time definition in the Standard Book of Rules has undergone a slight change. We quote herewith the latest and most authoritative definition of a train:

"An engine or motor or more than one engine or motor coupled with or without cars displaying markers."

WHAT is the general character of bearing used in locomotive journals?—G. A.

The brasses are usually used with semi-circular bearing surfaces and these are held in cast iron or cast steel journal boxes which have an oil box or cellar below the axle and which are held up to the axle by two bolts. These journal boxes usually have a vertical slide in the pedestals or horn pieces so that the engine may have considerable flexibility in rapid running in an up and down spring motion without danger of the wheels being raised from the track.



THE GREATEST FEAT EVER ATTEMPTED IN BOILER BUILDING

The World's Largest Locomotive

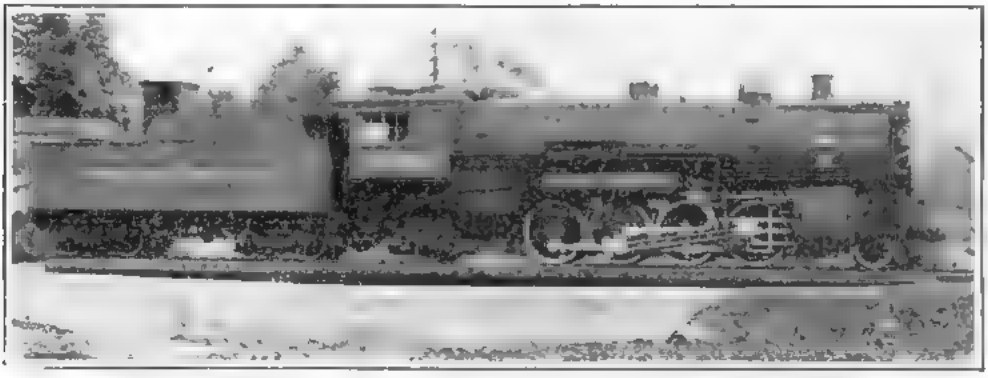
This Engine Proved a Savior in Fast Freight Traffic On the Big Haul Over the Bad Lands

By John Adams

THE largest locomotive in the world is owned by the Northern Pacific. She is nearly half as long as a city block, a four cylinder, single expansion job, articulated and what the giant jack can't do with a long string of freights over a 1.1 grade is just too bad. The American Locomotive Company built her in their shops at Schenectady.

The "Yellowstone" is a veritable Titan of the rails, with a boiler which, when working at capacity, will burn twenty tons of coal an hour, enough to keep two one-family houses warm throughout an entire average winter. The locomotive is a 2-8-8-4 type. Engine and tender combined weigh over a million pounds.

One of the reasons for her tremendous size was the insistence of the Northern Pacific that she be designed to burn an eastern Montana subbituminous coal obtained from an open pit mine at Colstrip. The mine is



THE NEW YELLOWSTONE TYPE LOCOMOTIVES ARE REPLACING THESE MIKADOS, ONCE THE ROAD'S BIGGEST FREIGHT POWER

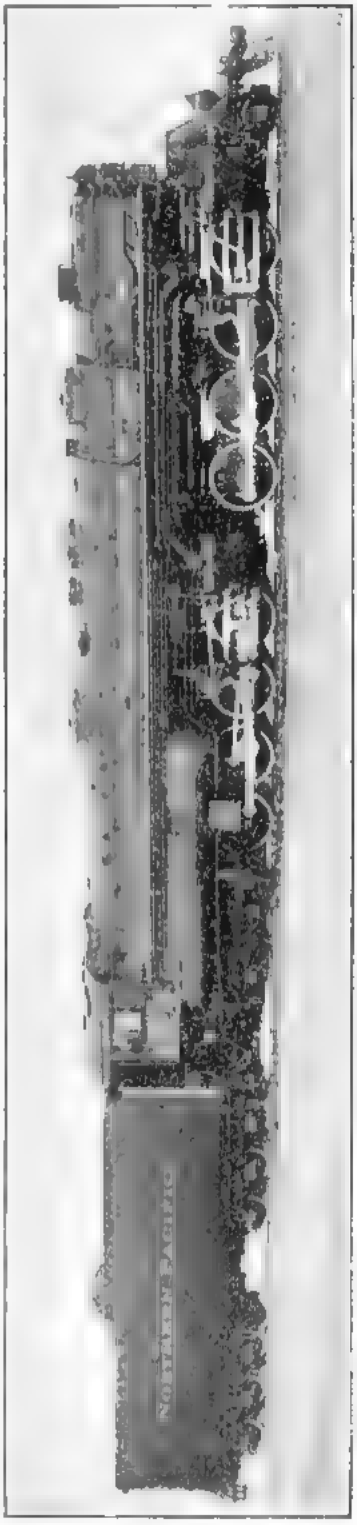
owned by the railroad, and though the coal burns freely it is comparatively low in heat units. In order to obtain the boiler horse power necessary to accomplish the work required of the engine, the builders had to devise the largest firebox and boiler ever applied to a steam locomotive. The firebox alone is twenty-two feet, two and one-quarter inches long by nine feet, six and one-quarter inches wide. Serviceable garages have been built with a smaller floor space.

The Yellowstone is capable of developing more than six thousand horse power. She had to be.

Between Mandan, North Dakota, and Glendive, Montana, on the Northern Pacific, there are two hundred and sixteen miles of mean going. The district cuts across the Bad Lands, serrated buttes, wind-eroded hills, dry washes, steep cañons, narrow gullies, the whole geography a jumbled and disordered maze of complex difficulties for the railroad surveyor. Columns of rock, cliffs carved by the processes of nature into grotesque figures rise at every hand. Unbending obstacles these. They tried the patience and the skill of the men who located the first line through that forbidding terrain.

The district has a ruling grade of 1.1 per cent. The location and extent of the grades are such that helper districts are not practicable. From Mandan westward to Glendive it takes a mighty good engine to haul freight over the ugly rises. The same holds true running eastward. The road was operating good engines—powerful 2-8-2 Mikados with a tractive force of sixty-three thousand pounds. Even these locomotives, strong as they were, could only handle two thousand, two hundred and twenty-five tons across the Bad Lands.

But the Northern Pacific uses four thousand ton fast freights. The old system meant delay at Mandan, delay at Glendive. Heavy trains arriving at either terminus of the district had practically to be cut in two to get them over the road. Extra equipment was



THE WORLD'S LARGEST THE YELLOWSTONE TYPE READY FOR MAIN LINE SERVICE HOW IT COMPARES IN SIZE WITH AN AVERAGE MAN MAY BE SEEN BY NOTING THE SIX FOOTER WHO IS STANDING BY THE FORWARD TRAILING TRUCK

needed. The time lost meant money lost. A thousand and one dividend-devouring items centered around that stretch of rail. The road made several new surveys with a view to relocating the entire district. By revision of the line it was hoped that some of the district's most objectionable features might be removed.

When the directors saw the staggering figures that would be required to reline two hundred and sixteen miles of North Dakota and eastern Montana Bad Lands into a road with a maximum grade between four and five tenths of one per cent, they promptly threw a very dignified fit.

"Adzooks!" they exclaimed with one accord. "Relocation of the line is not the proper answer. How about a single locomotive that will be capable of hauling our four thousand ton freights over this district as it is at present?"

They decided that if the idea was feasible, it was excellent. So they called in the American Locomotive Company, one of the, perhaps the foremost, designers of special requirement locomotives in the country.

"Gentlemen," they said to the locomotive builders, "all we want is a bigger locomotive than has ever been built in the world before. We want it to be able to do a two locomotive job. And don't forget that, quite naturally, we shall expect it to burn our own coal, that sub-bituminous stuff from Colstrip."

The American Locomotive Company accepted the challenge. They studied the conditions they would have to meet. All old limits as to size and power had to be exceeded. No data on previous jobs of similar magnitude was available as a basis for their figures. Nothing quite so stupendous in locomotive building had ever been undertaken before.

Building an engine to fulfill the Northern Pacific's requirements meant literally starting from the ground up. Moreover, the standard gauge for railroad tracks in this country being what it is—four feet eight and one half inches—the designers were considerably hampered in the amount of ground or base area at their disposal. Clearance between one set of tracks and another further cuts down any appreciable leeway in the width of a locomotive. Engines are not skyscrapers. They can't be extended upwards very far without seriously interfering with the inherent stability that lies in a low center of gravity. There is also an overhead clearance to contend with.

In locomotive building there is only one way to expand—lengthwise.

Accordingly, engine and tender combined, the overall length between couplers of the new Yellowstone is one hundred and twenty-five feet.

Designing a huge locomotive to meet a given set of conditions is an exact and strictly scientific problem in mathematics and engineering skill. The first point to be settled is what power the finished product must be capable of developing in order to do the work that will be required of it. Then the question is how large a boiler will be needed to produce enough steam at working pressure to develop the necessary power. Stripped to fundamentals, the boiler is still the limiting factor in building steam locomotives.

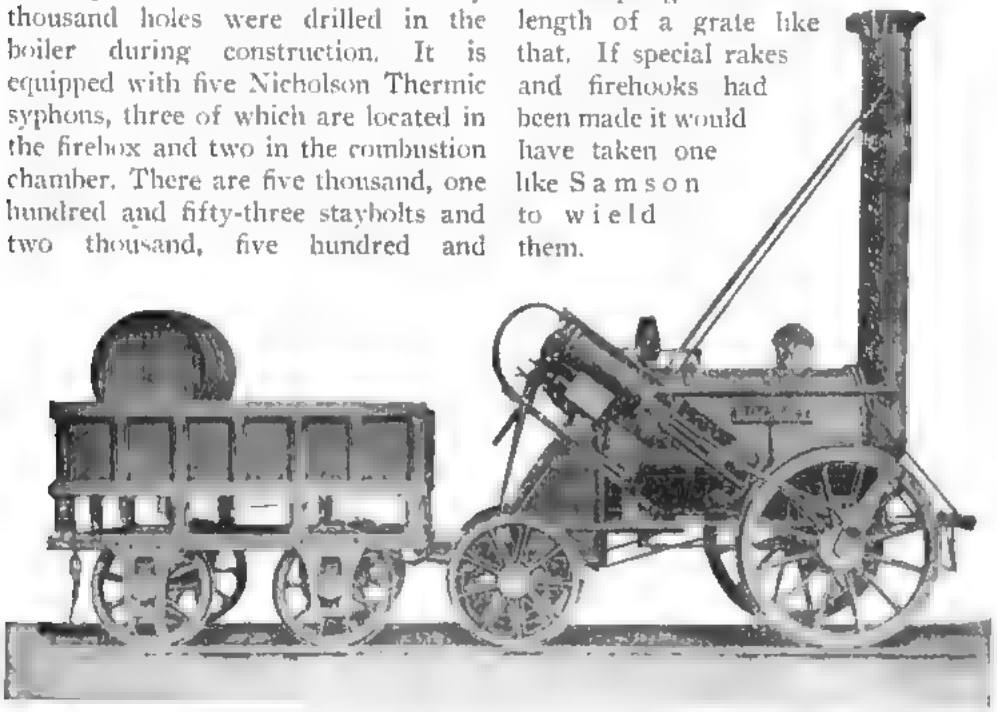
In the case of the Yellowstone the boiler and firebox problem was further complicated by the type and quality of the fuel that was to be used. When they finished with it, the builders had constructed a conical boiler weighing one hundred and sixty-five thousand

pounds and having a total evaporating heating surface of seven thousand, six hundred and seventy-three square feet. The total superheating surface is three thousand, two hundred and nineteen square feet. More than twenty thousand holes were drilled in the boiler during construction. It is equipped with five Nicholson Thermic syphons, three of which are located in the firebox and two in the combustion chamber. There are five thousand, one hundred and fifty-three staybolts and two thousand, five hundred and twenty-seven welded sleeves in the firebox assembly.

The total length of this boiler, which is capable of evaporating fourteen thousand, four hundred gallons of water every hour, is sixty-three feet, eight and three-quarter inches. Firebox and combustion chamber combined are twenty-eight feet, six and five-eighths inches long.

Coal is fed to the firebox with a standard Type B stoker, guaranteed to deliver forty thousand pounds of coal an hour.

It is all very well to build the largest locomotive boiler in the world, but unusual firebox problems arise out of such lavish dimensions. The grates must be proportionately large. In the case of the Yellowstone they are twenty-two feet and three inches long. No normal rake or firehook would be much good in attempting to reach the length of a grate like that. If special rakes and firehooks had been made it would have taken one like Samson to wield them.



AND FOR COMPARISON IN THE EVOLUTION OF LOCOMOTIVES, HERE IS SHOWN THE STEPHENSON ROCKET, A PRODUCT OF 1829

The American Locomotive Company foresaw all this when they were designing the firebox, and they ingeniously contrived two nine by fourteen inch openings located on opposite sides of the firebox about sixteen feet from its rear. This was fine as far as it went. It provided doors through which it was possible to rake any part of the grate area that couldn't be reached from the firedoor with the ordinary style of firehook

The openings were just the thing, but they stood higher than a tall man's head above the track level. A man couldn't reach them from the ground and he couldn't stand on the running

board and get at them from there. The gymnastics involved would be too difficult for the average person. India rubber contortionists, flying trapeze artists and other acrobats being scarce among railroad men, clever folding platforms of sturdy construction were located underneath each of the side firebox openings. They give a man a decent if not very large place to stand on while probing his fires.

The feature is exclusive in the Yellowstone.

Regarding further specifications, it might as well be mentioned that the smokebox has a length of one hundred and forty-six and one-half inches, a diameter of one hundred and six and one-sixteenth inches.

Heating feedwater for such a gigantic kettle as the Yellowstone involved another delicate point that was neatly overcome by welding together two standard size B Coffin heaters in such a manner that the same uniformity of steam passage was maintained as in the single size B unit, but the new system has double the heat transfer capacity of one heater. This arrangement provides what is probably the largest amount of heating surface of any feedwater heater ever installed on a locomotive.

Further, two standard Coffin centrifugal pumps, having a combined capacity of one hundred thousand pounds of water an hour, are located, one on the right side of the locomotive and one on the left. Separate control is provided for each pump, the idea being to use the combination at peak load only. Ordinarily one pump is held in reserve.

In addition to the pumps, the locomotive is equipped with two emergency Hancock injectors having a capacity of 104,000 pounds of water an hour.

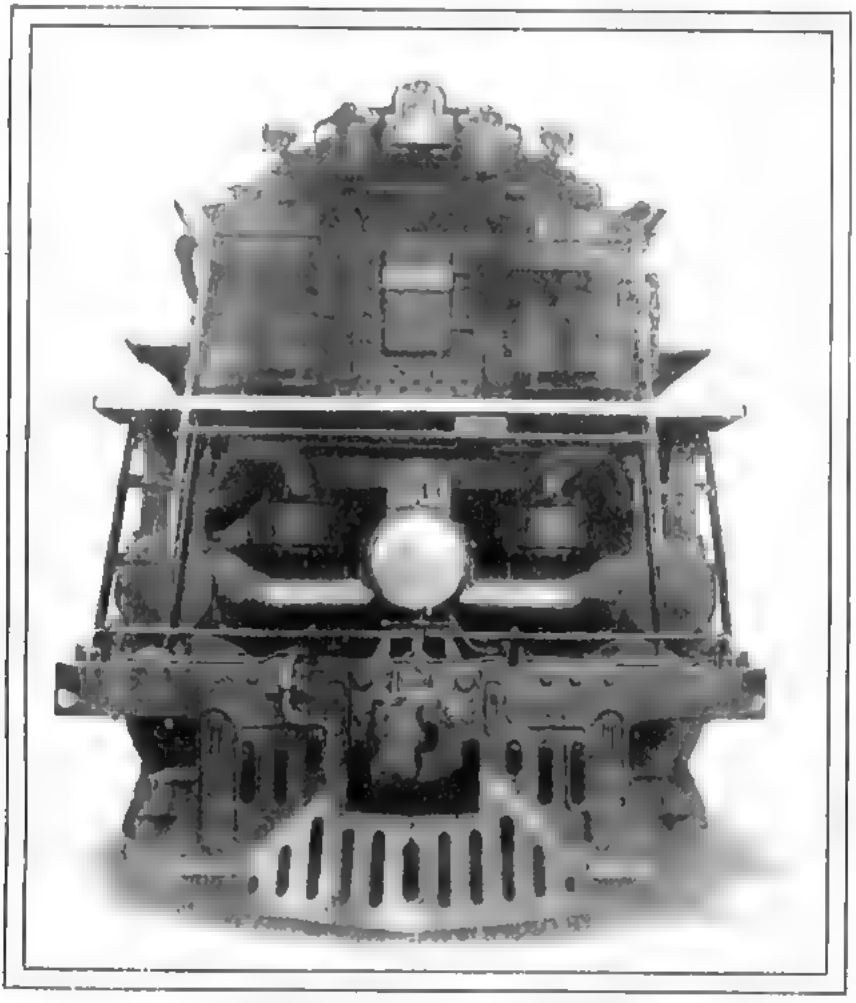
The engine truck frame and radius are fashioned from a single steel casting which includes the journal boxes. The front drivers of each engine unit are equipped with the Alco lateral motion device. The main drivers have journals twelve and one-half by fourteen inches. The remaining drivers eleven and one-half by fourteen inches. All driving axles are hollow bored. Grisco boxes are applied to the bearing of the main and intermediate drivers on both engines.

The total weight of the huge leviathan is one million, one hundred and sixteen thousand pounds. Of this the engine alone weighs seven hundred and fifteen thousand pounds, and the remaining four hundred and one thousand pounds is attributable to the tender. The drivers carry five hundred and fifty-four thousand pounds, the engine truck forty-five thousand, five hundred pounds and the trailer truck one hundred and fifteen thousand five hundred pounds.

This great mass of iron and steel is capable of developing a tractive force at seventy per cent cut-off of one hundred and thirty-nine thousand pounds, a little more than twice the tractive force of one of the 2-8-2 Mikados. The Yellowstone has a further source of power in the Franklin booster that operates at a fifty per cent cut-off and provides an additional thirteen thousand, four hundred pounds of tractive force applied to the rear wheels of the four wheel trailing truck. Altogether the largest locomotive in the world can develop a tractive force or pull of one hundred and fifty-three thousand and three hundred pounds. Plenty to do the work required of it.

It has the largest horse power output of any steam locomotive ever developed. However, considering tractive

force only, the Erie compound triples of the 2-8-8-8-2 type is rated at one hundred and sixty thousand pounds and the Virginian Mallet articulated



FRONT END VIEW OF THE YELLOWSTONE

2-10-10-2 type claims one hundred and seventy-six thousand, six hundred pounds as its rated tractive force

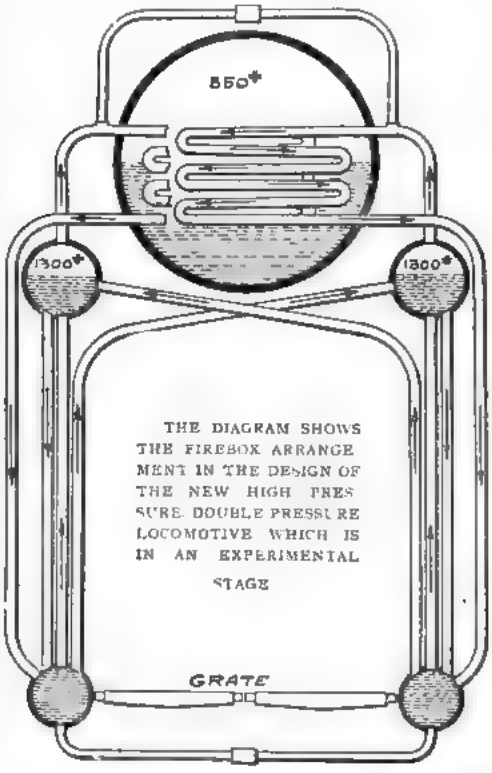
The power units of the Yellowstone consist of two sets of eight driving wheels each. The driving wheels have a diameter of sixty-three inches.

There are four cylinders taking their steam at a working pressure of two hundred and fifty pounds. All the cylinders have the same diameter.

The steam pipes feeding the cylinders of the rear engine are made of seamless tubing. Instead of being equipped with slip joints, provision for expansion has been ingeniously taken care of by installing the pipe slightly buckled upward at the center.

Independent pipes lead to each of the four cylinders, and they are so proportioned as to afford an equal supply of steam to each. Wire drawing is

eliminated. The arrangement on the Yellowstone permits equal operating pressures on all four cylinders, an important factor that materially reduces the strain and wear on the side connections and journals.



THE DIAGRAM SHOWS THE FIREBOX ARRANGEMENT IN THE DESIGN OF THE NEW HIGH PRESSURE DOUBLE PRESSURE LOCOMOTIVE WHICH IS IN AN EXPERIMENTAL STAGE

Getting a volume of steam at high pressure into the forward engine in an articulated type locomotive always involves one tremendously tough problem—that of obtaining a satisfactory flexible joint that will give readily with the swing of the forward engine as the locomotive takes a curve in the road. A jet of steam at two hundred and fifty pounds pressure is a particularly obstinate force to reckon with.

The American Locomotive Company was forced to do some high, wide and fancy designing to get steam into the forward cylinders of their Yellowstone. It was a distinctly pioneering proposition that their engineers were up against. Nothing as large as the Yellowstone had ever come out of their shops before, or out of anybody else's shops for that matter.

A flexible joint was needed strong enough to stand an enormous strain, yet pliant enough to give with the movement of the locomotive. There being nothing previously devised that the builders felt would do the business for them as they wanted it done, they immediately set about designing a joint for themselves.

After much experimenting they evolved a cast steel flexible joint so designed that a balanced pressure was secured in all parts of the connection. This relieved the necessary packing of much of the uneven strain to which it would otherwise have been subjected. The joint is of the ball type and is made steam tight by a special pipe packing.

The steam enters the joint through the same size opening as the steam pipe itself and is at once diverted at right angles to the line of pipe by a solid diaphgram cast integral with the joint itself. The top of the diaphragm has a concave surface which extends from the center to the outer edge of the outgoing ports. This clever concave construction distributed the pressure exerted by the steam over as large an area as possible. The space underneath the diaphragm is filled with a magnesium cement.

Having solved the problem of how to get steam into the forward engine, another difficulty presented itself. Steam is admitted into the cylinders by means of an American multiple throttle. Because of the extreme length of the Yellowstone the question arose as to the feasibility of operating the

throttle by manual control back in the engine cab. It could be done. But it would be a tough job for the hoghead, more or less comparable to asking a quartermaster on an ocean liner to steer his ship by the hand wheels aft instead of using the steam steering gear on the bridge.

The American Locomotive Company therefore designed and built a power-operated throttle device. Putting it on their Yellowstone was the first installation of a power throttle device on a steam locomotive. With it the engineman of the biggest locomotive can handle his throttle as easily as he can sign a "31."

The device is air operated and the mechanism is placed on the outside of the boiler just in front of the cab. Provision has also been made for manipulating the throttle by hand.

The Yellowstone's tender has some wholesale dimensions all her own. She can carry twenty-seven tons of coal, and possesses a water capacity of twenty-one thousand, two hundred gallons.

It was stated at the outset why the Yellowstone was built, and it is quite possible that this magnificent type of locomotive operated over the Northern Pacific lines will continue to hold the world's record, as far as size is concerned, for some time to come.

Some may ask what is the reason for these super-powered locomotives. Are they essential to the industry, or are they merely built just to show what can be accomplished in modern locomotive construction?

In the good old days, not so long ago, most roads seemed to have the idea that a freight locomotive was merely a heavy truck horse. The speed of both lent verisimilitude to the comparison. The railroad took any given freight locomotive, tacked on behind it as many cars as it could possibly haul and let the freight crawl across the country. General freight was admittedly a slow means of getting goods moved from one place to another. Today the roads are anxious to move just as many cars, but they insist on moving them faster. The railroads have suddenly become time conscious. Goods are moving with the greatest rapidity in history.

Paralleling the speeding up of traffic an immense improvement in the efficiency of fuel consumption has been developed.

This increased speed with which traffic is moving has proved of vast economic importance. Industry in general has been quickened. Delays due to irregular transportation service have been cut to a minimum. In many businesses the necessity for carrying large stocks has been reduced. The flow of goods from manufacturer to market has become a steady, swift moving stream.

Many causes have contributed to the change. But the most outstanding element perhaps has been the improved locomotive. To quote H. J. Downes of the American Locomotive Company:

"This modern policy—moving heavier freight trains at greater speeds over increased mileage per day—practically demands the modern locomotive."

In other words, bigger and better business needs bigger and better locomotives. After all, it is the locomotive that keeps things moving. Everything done in the construction, operation and maintenance of a railroad, from the first grading by a road gang to the actual pulling of the locomotive throttle by an engineman is done to

enable locomotives to haul freight and passengers with a maximum of efficiency and economy.

During the past few years there has been a very intensive development of the locomotive. For years designers of locomotives concerned themselves primarily with increasing the power of their engines. They still strive for increased power. But they measure it on a time and fuel consumption basis. This means not merely a locomotive that will pull. It means a locomotive that will give high starting effort and maximum sustained power to haul heavy tonnage at high speed over long distances.

The Yellowstone is a super-size machine designed to fulfill these conditions.

Whether further developments in locomotive building will ever produce a larger locomotive than the huge 2-8-8-4 that has been built at Schenectady is hard to say. New designs in increased power and efficiency may not necessarily be dependent on increasing the size of the locomotive. Entirely new principles may be involved. Experiments have already been made along various lines.

One of the most important of these new departures, an advanced type of locomotive radically different from anything yet seen in America, is the so-called high pressure, double pressure locomotive. Both the New York Central and the Canadian Pacific have authorized construction of one of these ultra-modern engines.

In general appearance this new steam locomotive will not differ very much from the large freight engines now in service. Weight and tractive power will roughly approximate those now used. However, as the new locomotive represents an attempt to improve upon the present engine, a machine conceded by railroad men and locomotive builders to have no superiors in efficiency in their class, it naturally includes some sweeping departures in design.

The new locomotive will make use of an indirect method of steam generation. Steam pressure as high as thirteen hundred pounds will be developed in a tube system which is exposed to the hot combustion gases.

The system is filled with distilled water and the steam generated therein rises into a cooling coil in the high pressure boiler. The steam is condensed in the coil, transferring its heat to the water of the boiler.

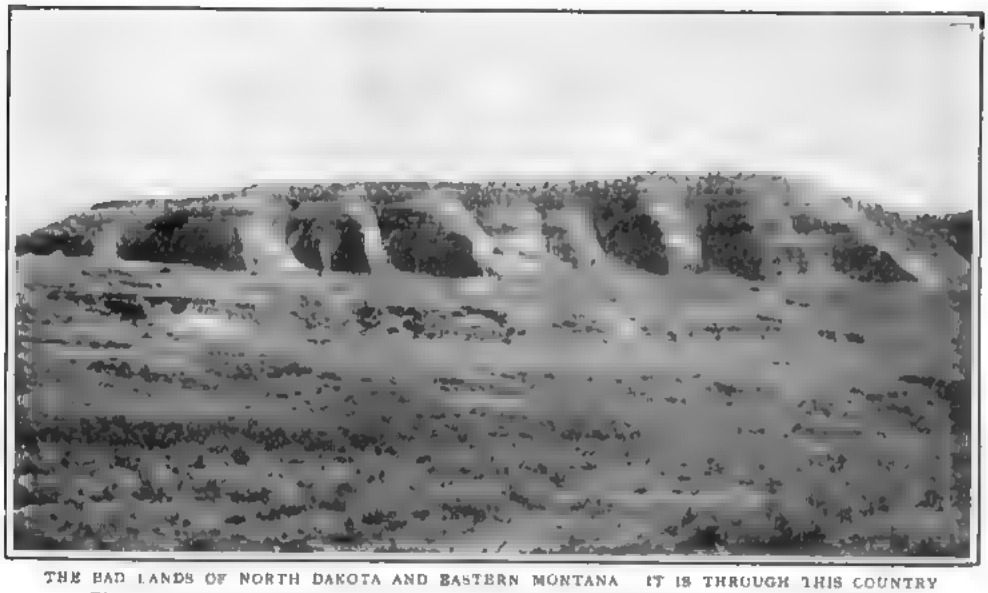
The condensed steam flows back to the bottom of the system through downcomers that are not exposed to the heat, passes through the heating surfaces again and make another trip up to the cooling coil.

The system is self-contained. The quantity of water in it never varies.

The cooling coil is the heating element for a high pressure drum carrying eight hundred and fifty pounds per square inch. The drum affords one of the most interesting and novel features of the locomotive. It is not exposed to direct radiation nor to high combustion temperatures. Furthermore, it is protected so that its walls cannot become heated to a temperature above that of the steam which it contains.

One high pressure cylinder uses the tremendous eight hundred and fifty pound pressure. The exhaust from the high pressure cylinder, augmented by two hundred and fifty pound pressure steam which is generated in a normal fire tube boiler shell supplies two low pressure cylinders.

The system is compact. The space occupied by the high pressure coil and



THE BAD LANDS OF NORTH DAKOTA AND EASTERN MONTANA IT IS THROUGH THIS COUNTRY THAT THE YELLOWSTONE TYPE HAULS ITS HEAVY TONNAGE ON THE LONG GRADES

the drum is practically identical with that of the firebox of any locomotive of usual design.

For further efficiency superheaters are used. Heating feedwater with exhaust steam by the non-contact method is also to be employed and the saving of all possible heat is provided for.

By utilizing this method of steam generation it is expected that locomotives will be able to take advantage of the steam reheating effect which has proved so efficient in the big modern industrial power plants.

Regarding this new type of engine, the American Locomotive Company has stated:

"The high pressure, double pressure locomotive is a new step in the direction of increasing the thermal efficiency of our present day locomotives. It has been stated that it will deliver an economy of from twenty to thirty per cent over the average locomotive of to-day. A potential saving therefore of twenty million tons of coal, or approximately eighty million dollars a year is involved through substitution of this design of locomotive for main line steam locomotives on American roads."

However, in connection with the giant Yellowstone and her supremacy in size as reigning Queen of Locomotivia this new high pressure, double pressure design has a side more spectacularly interesting than its possible economy. It offers an opportunity to increase materially the boiler horse power of a locomotive within the present boiler limitations in size and weight.

From this viewpoint alone the present question of higher steam pressures becomes of paramount importance. Imagine a Yellowstone equipped and designed on the high pressure, double pressure system with a rated horse power far beyond its present one. Conceive of such a super-powered locomotive if you can, capable of doing nearly twice as much work as the Yellowstone, which itself does as much as two of the big Mikados and then you

have some idea of the great locomotives that may whip long lines of heavy freights across the country at express speeds in the future.

In locomotive circles men are saying little about what may be expected in future development, but it will be interesting to watch the experiments

TABLE OF DIMENSIONS, WEIGHTS AND SPECIFICATIONS OF THE LARGEST LOCOMOTIVE IN THE WORLD

Type of locomotive	2-8-8-4
Service	Freight
Cylinders, diameter and stroke	4—26" x 32"
Valve Gear, type	Walschaert
Valves, piston type, size..	14 in.
" maximum travel.	7 1-2 in.
" outside lap	1 7-8 in.
" exhaust clearance	line and line
" lead in full gear.	3-16 in.
" max. cut-off in full gear	70 per cent

Weight in Working Order

On drivers .....553,000 pounds	
On front truck..... 48,500	"
On trailing truck, front axle 55,000	"
On trailing truck, rear axle 60,500	"
Total Engine 717,000	"
Tender 401,000	"
Total, Engine and Tender 1,118,000	"

Wheel Bases

Driving	44 ft. 6 in.
Rigid	16 ft 0 in
Total, Engine	60 ft 8 in.
Total, Engine and Tender	99 ft. 8 in.

Wheels, Diameter Outside Tires

Driving	63 in.
Front truck	33 in.
Trailing truck, front	30 in.
" " rear	42 in.

Journals, Diameter and Length

Driving, main..	12 1-2 in. x 14 in.
" others.	11 1-2 in x 14 in.
Front truck ...	7 in. x 14 in.
Trailing truck, front	7 in. x 14 in.
Trailing truck, rear	9 in. x 14 in.

Boiler

Type	Straight top
Steam pressure.	250 lbs per sq in
Fuel, kind	Rosebud, sub-bituminous
Dia., first ring, inside	103 1-4 in.
Dia., back ring, outside ...	110 1-4 in.
Firebox, length and width.	266 1-3 in x 114 1-4 in.
Tubes, number and dia. ..	92..2 1-4 in.
Flues, number and dia. ...	280..3 1-2 in.
Combustion chamber, lgth.	72 1-2 in.
Length over tube sheets..	22 ft.
Grate area	182 sq. ft.

Heating Surfaces

Firebox and combustion chamber	610 sq. ft.
Syphons	262 sq. ft.
Tubes and flues	6,801 sq ft.
Total, evaporative	7,673 sq ft.
Superheating	3,219 sq. ft.
Total evaporative and superheating .....10,892 sq. ft.	

Tender

Water capacity	21,800 gals
Fuel capacity	27 tons
Wheels, diameter	37 in.
Journals, diameter and length	7 in. x 14 in.

Tractive Power

Engine, 70 per cent cut-off .....140,000 pounds	
Booster, 50 per cent cut-off 13,400	"
Total 153,400	"

Special Equipment

Superheater	Type E
Feedwater heater	Coffin
Stoker	Standard type B
Syphon	Nicholson
Booster.	Franklin, trailer

HE GOT A HAND ON THE TRIGGER GUARD AND TWIN REPORTS DEAFENED HIM

Shadows of the Freights

Death Stalked the Swaying Decks as Frisco, the Brakeman, Sought to Clear His Name

By Russell Hays

EIGHT minutes behind schedule and with a clear track ahead, the Banana Express was shaking the earth with her thunderous tread and shattering the sultry quiet of the cane fields stretching away on either side of the right of way

Down the top of it stole Frisco Thurber, half crouched, darting swiftly from reefer to reefer. Closer and closer he came to the yellow square of light in the caboose cupola—a skulking shadow that hunted down the rushing, wind-swept runway of the manifest. He paused behind an icing hole cover, leaped the black crevasse between cars, came creeping across the last reefer, and bridged the gap between it and the roof of the caboose.

Slowly he crawled up to the cupola. The light shining out of it showed his face to be strained and furtive. The blond stubble on his short, stubborn chin was smoke-smeared and unkempt. Crow's feet were etched at the corners of his blue eyes—eyes that

were hard now, hard as tempered steel.

He circled behind the cupola. Staring down into the dimly lighted interior of the caboose, he could see the lanky frame of a brakie stretched out on a side seat. At the table sat a tall, hump-shouldered man working over an irregular pile of yellow papers. A touch of gray showed from under the edges of his conductor's cap. On a finger of his left hand, reflecting the light of a splash of crimson, gleamed a huge garnet.

For an instant the eyes of the man up on top widened. His face pressed close against the glass.

"Old Cap Edwards!" he grunted. For a breath the harshness seemed wiped from his chapped lips. "Must 'a' changed his run." The lips set close again. "The damned old fool!"

As if the words had carried above the ceaseless roaring of the freight, the man at the table looked suddenly upward. He blinked and stared hard, his mouth agape. His lips moved and then snapped shut. His eyes narrowed and took on the stony coldness of granite. With a glance at the recumbent figure of the brakie, he rose silently from his chair and moved toward the door.

A scowl traced itself across Frisco's face. He jerked erect, breathing hard, and whirled about, to go racing back the way he had come. Three cars he covered, and stopped, cursing himself for a weakling and a fool.

Looking back toward the caboose, he could see Old Cap's sloping shoulders outlined against the lighted cupola. Frisco's stubborn chin shot forward aggressively. He turned. They met near the middle of the second car, and there they stood with feet braced well apart, an arm's length from each other, measuring each other by the uncertain, smoke-dimmed light.

The wind swirled down about them and clutched at them. The reefer swayed gently in accompaniment to the hammering hiss of its wheels.

"Well, Frisco, I see you're back," the old conductor began. "Couldn't stay away from the old T. P., eh?"

"You're seein' a little better'n usual to-night, ain't you?" sneered Frisco.

Old Cap's mouth tightened.

"Don't worry about my eyesight, kid," he growled, dragging out the words. "Better be thinkin' about what you'll tell the bulls. They're watchin' for you down here. I'll tell you somethin' else—you're gettin' off at the next stop, an' stayin' off, see? You don't pull this brakie hi-jackin' stunt again on my run."

"Me hi-jackin'? Listen, cap, you're crazy—crazy as a cuckoo! I never pulled that job. Ain't you ever got it through that thick head of yours it was this yegg they call the Slugger?"

"Ye-eh? Still wantin' me to believe my eyes is goofey? You got plenty of nerve, all right!"

"Call it that if you want to."

"You're so blamed innocent, why was you runnin' away awhile ago? It looks bad, Frisco—looks bad!"

"Yaw, I can get your point of view; but let me tell you somethin', cap. You get blacklisted, an' see how you like it. About a year of this bein' pointed out as a killer, a hi-jacker, an' God knows what else, an' you get so your insides get shaky at the idea of meetin' somebody you know. It's no joke, take it from me, even if you're innocent as an angel in heaven."

"Which you ain't," Old Cap put in.

"All right, all right—have it your way. One thing, I ain't the Slugger."

"Naw?"

Cripes sake, cap! You don't think that?"

"Why not? You was a brakie when you beat up that gumshoe. If what I hear's right, the Slugger pulls the same kind of a job—knocks 'em down with a billy. A nice stall, eh, posin' as a brakie, so the 'boes won't fight back? Trouble is, Frisco, you overplayed your hand tryin' to croak that dick. Oh, you was framed, sure!"

"I never said I was framed; but I was tellin' the truth when I said you'd seen somebody else and thought it was me. You and Cline couldn't believe me. You'd rather believe a half drunk dick. A couple o' swell pals you were! An' now you got the gall to try an' tell me I'm the Slugger!"

"Ain'tcha?"

Frisco gave a hissing grunt and lunged forward, his eyes slitted, his body tense.

"You—"

"No, you don't!" cut in the older man, pushing the muzzle of an automatic hard against the ex-brakie's ribs. "No use, Frisco, tryin' to pull that innocent stuff with me! I don't railroad two years with a man without bein' able to tell him a car away. Maybe you think I like to turn in a report like that. Lord, it made me sick, after all the time thinkin' you was workin' for the supe's job! It ain't no use—you got to get off my train!"

Frisco's smudged cheeks sucked close against his gums, and his lips parted in a mad grimace of pain.

"Aw, shut up! Let me tell you why I'm ridin' your damn rattler!" he cried shrilly. "Back in the yards I ran across a stiff who'd had the life half clubbed out of him. Broken jaw—God, what a mess! 'Brakie got me,' he says, an' points at your lousy banana train. It looks like one of the Slugger's jobs to me. Well, I've been on his trail a long time, an' when I find him—"

Frisco left the sentence unfinished. Twin points of flame burned in his narrowed eyes.

"Better stay off the tops to-night, cap," he concluded. "My eyesight ain't as good as yours!"

With a quick, contemptuous shrug, he swung around on a heel and went slithering off up the weaving line of the runway.

Behind him, Old Cap rubbed the back of one hand falteringly across his eyes. With deep lines between his brows he stared after the silhouette fading in the night. Then he turned to walk slowly, heavily, back to the caboose.

II

Frisco had again dropped into a slinking, furtive crouch, as he went darting from reefer top to reefer top. His eyes, slitted against the oily blast of air sweeping down the tops, searched the runway. Far ahead he could see thin, blurred lines of light shining from the cab of the locomotive and the orange smudge of billowing smoke hot from the flaming belly of the engine. The runway quivered beneath his feet. The wheels clicked monotonously over rail ends. Sure-footedly he stole on.

Just his rotten luck, he was thinking, to have bumped into Old Cap! Well, anyhow, he had learned what he had wanted to—neither the cap nor the rear-end brakie could have been the hi jacker back in the yards. Both were too tall and thin to fit the hobo's incoherent description. Of the train crew, that left only the front-end brakie as a suspect. Should the head shack turn out to be of the right build, then perhaps Frisco was once again riding the same train with the Slugger.

The Slugger! A man who he had

never seen—at least, not knowingly; yet a man who had wrecked the even tenor of his life. A fantastic figure of the night, a pseudo-brakeman who hunted through the moving shadows of the fast freights. One day he would appear in Texas, sticking up a flock of hoboes, clubbing them, and fleeing into the darkness. A week later he would blackjack a stiff somewhere in Kansas for a few measly dollars; but always that brutal slugging!

Even Frisco knew pitifully little about this man of mystery. He knew the Slugger to be a yegg with a bad record behind him, including a hitch in San Quentin. He knew that they were of the same full-chested, long-bodied build. He had heard that the hi-jacker's face was broad, that it was narrow; that his nose was short, that it was long. He had heard a dozen conflicting tales that agreed in only one respect—the Slugger was bald!

He had heard, too, in a roundabout fashion that it was the Slugger who had beaten up and nearly killed a railroad detective on the T. P. a year before. He knew that it was the Slugger whom Cline and Cap Edwards had mistaken for him on that disastrous night, which, as he thought back to it, seemed an eternity ago. Somehow he was going to make the Slugger confess to that job!

He crossed a dozen more refrigerators, and paused. Before him the runway dropped away. Straining his eyes, he could see that the next car was a steel gondola. It was about half filled with sheet iron—heavy stuff, a rush order to an oil field, most likely. Newspapers had been spread out on the iron, and lying and sitting on these were half a dozen darker blurs—a flock of hoboes riding the express into Shreveport.

They looked up suspiciously as Frisco came swinging down the end ladder of the reefer and leaped over to the iron. Staring back at them, he saw a couple of negro boys, a runt of a kid barely out of his teens, and three blanket stiffs braced against their bed rolls.

"Where you headin', buddy?" asked one of these, who wore a pair of nickel-rimmed glasses set close against the bridge of a long, spoutlike nose.

"Kansas City," replied Frisco.

What business was it of theirs where he was going?

"Well, you got a long ride ahead of you," said Glasses, "less'n you can stick with this fruit train."

The man next to Glasses inhaled deeply on a cigarette, its cherry glow revealing small, squinty eyes deep-seated beneath heavy, bulging brows.

"You'll play the devil ridin' 'er through Shreveport," he muttered. "They're plumb hostile up there now. Some lousy hi-jacker beat up a fireman."

"Yeh?"

"Nothin' else," said Glasses.

"Huh!" grunted Frisco. "Say, you ain't seen the front brakie on this train?"

"Not me; but one of the niggers here seen him settin' up in front awhile ago. He ain't botherin' nobody."

"He ain't?" Frisco moved on again. "I got a buddy was goin' to grab the front end. Guess I'll see if I can find him."

He jumped up on the rim of the gondola, stepped lithely over to the box car ahead, and climbed up the ladder and over to the runway. Not much chance of any of the blanket stiffs being the Slugger, he mused. They seemed to know one another too well.

The kid was evidently out, as well as the coons. If it was true that the brakie wasn't bothering anybody, well, a shack like that would hardly be smashing a hobo's jaw with a brake club.

He found the front-end brakie sooner than he had expected. The yellow dot of a lantern shone over the top of an icing hole cover not four cars ahead,

FRISCO WANTED A GOOD LOOK AT THE BRAKEMAN'S FACE

and Frisco could see the man's thick body perched on the edge of the car. He left off his stalking and straightened up to walk boldly along the runway. Stealth would do him little good here. What he wanted was a good look at the brakie's face and a chance to size the fellow up. The easiest way to go about it was to pretend that he was looking for a pal.

At the end of the car, Frisco stepped over the gap to the next with well-feinted fear and caution. No use his being too much at home on the tops! The brakeman, too, might mistake him for the Slugger. Coming closer, he could see that the brakie had spotted him, and could feel the man's eyes moving slowly up and down his frame. Suspicious, was he? Frisco half expected the shack to rise and turn to meet him. The other man did no such thing, however, but merely glanced at him casually, curiously, as he came up.

"Hey, there! Where yuh goin'?" the brakie growled.

Frisco, staring hard at him, could see that he was broad of shoulder and long-bodied, and that he wore a railroad man's cap with a brass plate across the front of it. What held Frisco's gaze, however, was the man's face. The light, reflecting upward on it, gave it a peculiarly thick-featured cast, showing a thin, downward curving

slit of a mouth, a beaked nose, and shadowed eyes as unblinking as a spider's. Malignant eyes they seemed to Frisco—eyes such as he had imagined the Slugger might have.

For a moment Frisco's breath tightened and caught in his throat. Was there a chance that it might be the Slugger? No, that could hardly be possible. Pose as a brakeman though he might, the Slugger would hardly be sitting boldly on the top of the train with a lantern beside him. Any of the train crew, going past him, would instantly detect that he was not the front-end brakie.

Frisco's tense body relaxed.

"Lookin' for a side kick of mine," he said. "Thought he might be ridin' on up ahead."

"No place there for him to ride. All sealed cars," replied the shack easily. "I just been over it. Yuh better get back there in the gondola with the rest of those fellows. The skipper's down on 'boes. He'll raise hell with me if he sees yuh."

"Ain't run across a fellow my build anywhere on the train?"

The brakie thrust his head forward, tilting his lantern so that the rays fell on his questioner's grimed face.

"Say, ain't I just told yuh they ain't nobody up there? Yuh just come from the gondola, didn't yuh? Yuh better get off this train the next stop!"

"Yeh, mebbe," muttered Frisco, turning back.

He felt discouraged. It must have been a brakie, after all, who had clubbed the stiff back in the yards. This fellow looked quite capable of it. Anyhow, he wasn't the kind of bird that it paid to argue with. It was too easy to talk one's self into a rap over the dome. Frisco might as well go back and roost on the gondola for awhile. There was nothing much else that he could do.

Of course, there was still a chance that the Slugger might be riding the train. He'd go over it again, Frisco decided, before they pulled into Shreveport.

On the other hand, the stiff might have been mistaken as to which train his attacker had caught. Perhaps he had mistaken the brakie for the Slugger, as might easily happen in the dark. In that case, Frisco could see, he had been wasting his time on another blind trail.

Failures like this made him discouraged. It looked as if he was a fool chasing around the country in this fruitless search. There were other jobs besides railroading that a man could work at; but the trouble was that somehow he didn't seem to stick at them. He couldn't keep his breath from coming faster when he heard a highball or a hotshot roaring through the night.

III

Arriving at the gondola, Frisco climbed down into it and squatted silently against the shivering side of the car.

"Find your buddy?" asked Glasses.

"You don't see him," growled Frisco.

The blanket stiff sniffed. Frisco stared moodily up at the star-sprinkled heavens, at the Big Dipper. The brakie would be moving along pretty soon, he was thinking. He would wait half an hour or so and then go over the front end of the train, just to make sure that no one was there.

He thought of Cap Edwards back in the caboose, and wondered what the old man was doing—the bull-headed, stubborn old fool!

"You an' your buddy hook 'er at the same time?" the beetle-browed stiff was asking.

Frisco looked at the man questioningly. These dudes were strangely interested in him!

"Naw, he caught it before me," he said at length. "Have any trouble back in the yards?"

"Not much," replied Glasses. "We kept pretty well out of sight. I can't get the idea of workin' on these shell roads for the fun of it. I crave to get up into the wheat fields, where a man can make some jack."

"Know what they're payin' this year?"

"Four bits an hour, they tell me," chimed in the third stiff, a skinny bird with a lantern jaw.

Frisco ran his nails through the itching stubble on his chin.

"Might head up that way myself," he remarked musingly. A man had to do something for a living, he was telling himself.

"Beats workin' with a bunch of niggers," said Glasses, nodding his head toward the two colored boys.

The latter eyed him uneasily, doubtlessly thinking of places far more congenial to the company of a couple of well-meaning young duskies.

"Seems like these folks down here ain't forgot the Civil War yet," said Lanternjaw. "The other day—" He glanced up abruptly, and added, in a hiss: "Here comes the shack!"

Frisco followed the line of the speaker's gaze. Outlined against the roof of the box car ahead he could see the thick body of the brakeman. As the latter held the lantern behind him, the better to peer down into the gondola, he presented an uncanny silhouette framed in light. Something in the forward bend of brakie's long body, in the intentness of his gaze, gave him a menacing aspect.

Frisco could hardly define it, yet for some reason he felt a growing mistrust of the man. He felt his pulse quicken; but it was all foolishness, he told himself. He had no quarrel with the shack.

Glasses leaned over closer.

"He try to shake you down awhile ago?" he whispered.

"Naw," Frisco told him.

The shack was coming down the ladder now, his lantern jerking along from step to step. What if by some mysterious quirk of fate he should be the Slugger, Frisco was asking himself? He dismissed the thought in the next breath. The brakeman was merely going along the train, keeping an eye peeled for a struck brake or a dragging brake beam. Most likely he would go on about his business without even looking at the passengers in the gondola.

At first it appeared as if this was the the brakie's intention. He strode the length of the gondola, glancing neither to right nor to left. At the far end, however, he halted and turned slowly back, holding the lantern well in front of him.

"Say, what are yuh birds ridin' on?" he growled irritably.

No one answered him.

"Yuh all got special passes, eh?" he muttered, tapping his leg with his brake club. "Like hell! Come on, kick through! Yuh can't ride this train for nothin'!"

To Frisco it was an old story, this of the trainman trying to bluff a few dimes and quarters out of a bunch of hoboes. His lips curled contemptuously. He would see the big bluffer in hell before he would give him anything!

The brakeman stepped over and

gave one of the negroes a kick in the groin—an unnecessarily brutal kick, it seemed to Frisco.

"Whatcha got? Hand 'er over, kid!" the brakie snapped. His voice was hoarser now, as if tempered with rising anger.

"Hard-boiled devil!" whispered Glasses.

The negro searched frantically through his pockets, dug down into his shoe, and held up something.

"Heah's a dollar, boss!" he whined. "Ah ain't got another cent!"

The shack pocketed the coin and prodded the other negro viciously in the ribs with his brake club. He got four bits, then turned on the white boy.

"All right!" he growled.

The kid shook his head, his eyes staring. He was scared—there was no getting around that.

"I'm broke flat. Ain't had nothin' to eat since mornin'," he quavered. "Please let me ride to Shreveport. I got to get home!"

"Don't hand me that! No use yuh stallin'!" gritted the brakeman, shaking his club threateningly.

Frowning wrinkles had come between Frisco's brows. His blue eyes narrowed and grew hard as polished sapphire. Curse such a trainman! Why, any fool could see that the kid was broke and half dead from hunger. What was the sense in scaring the life out of him? What would Cap Edwards say if he knew that one of his brakemen was up here blackmailing hoboes? A plenty, most likely. Why couldn't the old fool happen along, as he had that other time? Where was it—on the car behind that he had been?

IT WOULDN'T DO FOR FRISCO TO POKE HIS HEAD INTO THAT BLACKJACK

Frisco unconsciously glanced up at the top of the following reefer. His eyes glittered, and his lips parted in a grim smile. Barely discernible at the end of the runway he could make out the rounded shape of a head—Old Cap in person, he guessed. Ah, the captain was getting tricky in his old age—hiding out above the gondola waiting for Frisco to hi-jack the hoboes and reveal himself as the Slugger. Well, it was a hot joke on Old Cap!"

A sudden, terror-pitched scream brought Frisco's gaze back to the brakie. It was from the kid. It was the kid who was sliding down against the side of the gondola, his body limp. The shack was crouching above him, glaring over at the blanket stiffs.

"Don't the rest of yuh try any tricks!" he hissed. "Knife me, will yuh?"

The brutal fellow crashed his club over his victim's head again. The kid groaned and lay still, his empty hands stretched out across the sheet iron in front of his head.

Frisco stared fascinated at the huddled figure. The kid had had no knife—he was sure of that. What kind of a stall was this brakie trying to pull, anyway? He must be stealing the Slugger's stuff.

"Come on, yuh birds—shell out!" he was snarling. He stole a step closer. "None of this chicken feed, either! Whatcha got in them blankets? Open 'em up, and make it snappy!"

"Say, for cripes' sake," protested Beetlebrow, "what's the big idea?"

He cowed before the man, fear showing in his drawn face.

Frisco's face, half shadowed by his hat, had gone blank. He trembled slightly; but this was because of the tenseness of his muscles. Presently the shack would reach out to take some jack from Glasses, who was digging into his jeans; and when he did—

From the corner of his eye Frisco caught the movement of a lean, stoop-shouldered figure coming quickly down the reefer ladder. Yes, it was Cap Edwards, and Frisco wondered what the old man would have to say to his brakeman. Cap saw red on a job like this.

"I'll let him have his say first," Frisco whispered to himself.

Old Cap had leaped over into the gondola, and was coming up silently behind the brakie. Glasses saw him too, and stared hard at him, probably thinking that he had come up to share in the pickings. The brakie, following the hobo's gaze, glanced over his shoulder, then whirled around and stepped back, so that no one was behind him.

The lantern swung up, revealing Old Cap's eyes, two chips of flint on either side of his thin, high-ridged nose. He blinked, temporarily blinded, and jerked up his automatic, his mouth a cold, mocking slit.

"Well, Frisco, that was quite a story you put out," he said in a dull, dragging voice. "Ye-eh, you almost had me believin' you."

Frisco held his breath. Cap Edwards was thinking that he was the brakie! Why, this wasn't the head-end shack! It couldn't be, or Old Cap would have recognized him before now. The blind old fool! He would mighty soon find out his mistake.

Edwards stepped closer to the hi-jacker. He was out of the lantern's yellow circle now. Within an arm's length of the brakie he halted uncertainly and leaned forward, still talking in a dreary monotone.

"The game's up. This time you'll get to tell your story to the judge. You—" Frisco sensed rather than

heard the old man's gasp. "You ain't—you—what the hell?"

IV

THE hi-jacker's club had flashed down, and Old Cap's automatic went spinning across the sheet iron. Frisco had a glimpse of the old conductor's face. His gums showed in a grimace of pain. He clutched at the brake club, and a lantern swept in a sudden wide arc.

"Watch out! Duck, cap!" cried Frisco.

He grabbed at the hi-jacker's arm an instant too late. The lantern blinked out and fell to the sheet iron. Old Cap, his knees buckling, followed it.

Frisco caught a flash of metal in the hi-jacker's hand, and realized barely in time that the pseudo-brakeman had dropped his club to whip an automatic from under his armpit. Frisco got a hand on the trigger guard and shoved it aside. Twin reports deafened him, and spitting flames seared his coat sleeve.

Throwing his shoulder into the hi-jacker's chest, he heaved with all his strength and carried the man off his balance. Both combatants stumbled and fell.

As they struggled to their feet, Lanternjaw stepped in to make a jab at the hi-jacker's face. Frisco had a grip on the automatic, and was wrenching it out of his antagonist's hand. Lanternjaw's blow, miscarrying, took him in the eye and staggered him, and the pistol fell to the sheet iron.

As Frisco reached for it a toe caught him in the pit of the stomach, hurled him backward, and left him sick and weak. The hi-jacker had jerked out a blackjack from somewhere. It looked no bigger than a sausage; yet when it landed on the back of Lanternjaw's neck he dropped as if he had been pole-axed.

"Take that, yuh damned bum!" spat out the hi-jacker.

He swung again as Glasses and Beetlebrow jumped him. Beetlebrow staggered back blindly, moaning, his hands clutching at his head. Glasses hesitated and side-stepped.

Frisco was rolling to his feet, moving warily forward, his arms outstretched. A strange fixity had come to his slitted eyes. As he stared at the snarling, cursing figure striking at Glasses, his teeth showed in a smile that was not a smile, but rather a sort of ghastly smirk. At last he was face to face with the Slugger!

In that seemingly endless second during which he had lain beside Old Cap, gasping for breath, he had discovered that the hi-jacker was the Slugger. He had seen that the man's bullet head was bald. The bare pate had shone faintly in the starlight, above a face twisted in an infuriated, bestial snarl.

Glasses gave a sharp nasal cry as the billy caught him on his upraised arm. The Slugger turned on Frisco.

"Yuh want some, too, huh?" he hissed.

Frisco darted sidewise and dodged the blackjack. He grabbed up the brake club which the Slugger had dropped when he drew his gun, and in the same spinning movement he struck up at the hi-jacker's arm. He felt the give of flesh, and heard the Slugger's furious, raving cry.

In the same breath Glasses brought a bed roll down over the Slugger's head and sent him reeling backward. Frisco, his club raised, darted after the enemy.

The Slugger jerked up his billy, glared at Frisco's squat figure, as

rugged and long-bodied as his own, and read aright the ruthless message in those narrowed eyes. He whirled suddenly. Two gliding steps, and he was on the edge of the gondola, was climbing up the box car ladder.

The brake club smashed sickeningly against his shin. He struck back blindly with his billy. Frisco ducked, leaped for the ladder, and swarmed up it two steps behind the killer. The latter came to the top and paused. Instinctively Frisco pulled himself close against the side of the car. It would not do to poke his head up into that blackjack—not with those whispering, spinning wheels waiting down below to finish the job. He swung around to the outside ladder and shot upward, striking as he came.

The brake club crossed with the billy, and was nearly wrenched from his hand. The Slugger struck again, then twisted backward to his feet and went racing up the runway, his bald head shining.

Frisco jumped for the runway. From the corner of his eye he glanced back into the gondola. Glasses was leaning over one of the other stiffs. Cap Edwards was trying to sit up. The negro boys cringed in a corner. No help there—not for the present, at any rate; but Frisco didn't care particularly. It was his job, his to finish, after all these weary months.

The Slugger was at the other end of the car, his head down, sprinting away. Far ahead of him Frisco could see the lights of a town reflected against the black curtain of the sky. He clutched his brake club more firmly. Ahead was the Slugger!

Frisco sprinted after him, feeling instinctively for the weaving surface of the runway, shortening his stride to leap the black gaps between cars. He sucked in a great breath of the sultry air rushing back to meet him. It helped the feeling of nausea in his stomach, lent him new strength.

It seemed to him that he was gaining on the Slugger—that he was slowly, steadily creeping up on him. The smudge of the engine grew brighter and brighter, and was not ten cars ahead now. What would the Slugger do when he got to the tender? Would he turn and fight?

For the moment Frisco forgot that he was chasing a killer. Two squat, apelike shadows they were, bent forward, racing down a narrow, trembling path, on either side of which lay a rushing, inky void.

So abruptly that he seemed snatched down by some invisible hand, the Slugger dropped to his hands and knees. Too late Frisco saw the move. His breath stuck in his throat, for he saw Death's bony fingers reaching for him. He couldn't stop, and to turn aside was to be whipped off the top. What if he stumbled over the Slugger? No need to ask, if there was a gap between cars just ahead.

He leaped high in the air and cleared the Slugger's body. He saw the black abyss between cars beneath him, but his toe touched the runway of the next car.

He whirled about and came running back. The Slugger had disappeared over the side of the car and was climbing down the outside ladder. Frisco took the ladder at the end. The Slugger's intention was plain—he was going to drop off from the bottom step.

Recklessly Frisco dropped down the ladder. The Slugger was at the bottom, staring up at him from a curiously grimacing face. It reminded Frisco of a spider's. He wondered what the

Slugger was waiting for, and why he didn't jump. Frisco was only a step above him now.

Suddenly the billy thudded in the middle of Frisco's back. A paralyzing pain ran through his hips. For a moment he hung there helplessly. Then he shifted his club to his other hand and lashed out at the Slugger's bald pate. He missed. The killer gave a demoniac, cackling laugh and struck again with the billy.

"Run me down, will yuh?" he leered.

Frisco took the blow on his hip. He couldn't stand much more punishment, he knew. He shot his right arm down through the rungs of the ladder. That would keep him from falling, for a w h i l e; and with all his waning strength he smote at the shining, hairless skull. For a moment he thought he had hit the mark; but no, he had only struck the Slugger's shoulder.

A hand felt for Frisco's trouser leg. A cold chill raced up his back. So that was the game? The Slugger was trying to drag him down under the wheels!

Even as the killer's hand jerked his feet off the ladder, he brought down the brake club once more. He felt the hand loosen from his leg, heard the Slugger give a piercing shriek, and saw him drop sidewise against the spinning face of a wheel. He knew that the man had lost an arm, a leg, or perhaps both. Frisco shuddered and dropped the club, to clutch the ladder with his other hand.

He was still hanging there weakly when Cap Edwards and the front brakie found him. The latter was still blue around the gills from cold, having just been let out of the icing hole into which the Slugger had locked him. Old Cap had heard his frantic pounding on the cover.

Together they pulled Frisco up to the top of the reefer.

"You know, F r i s c o, you're a damned fool runnin' after a yegg like that. It's a wonder he didn't croak you," crabbed Old Cap.

Frisco glared up at him.

"A hell of a pal—" he started.

Cap Edwards had turned his head shamefacedly, for he couldn't meet the other's gaze. A lump rose in Frisco's throat. He reached up and grasped the old conductor's hand.

"How about gettin' me reinstated on this lousy run?" he growled gruffly.

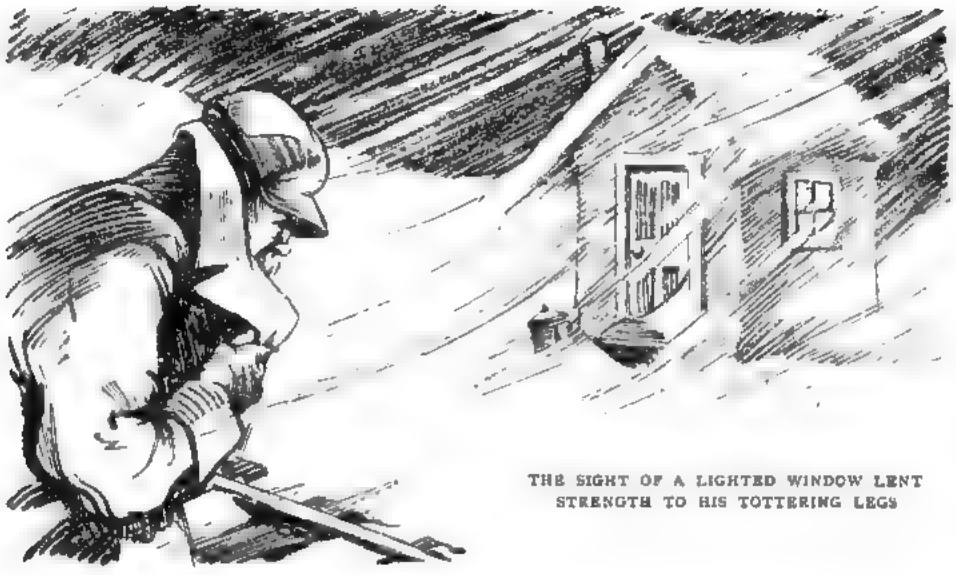
"What—a bum like you? I'll see the supe in the mornin'," said Old Cap.

SALT BY THE TRAIN LOAD

WHEN they move salt over the Erie Railroad they don't move it in a package local. An Erie train of fifty-one cars recently left Silver Springs, New York, with more than two million pounds of salt on board, consigned to Lancaster County, Pennsylvania. This movement was enough to cause quite a ceremony.

A group of officers and employees of the Worcester Salt Company and Erie officials and townspeople gathered to see the train get under way. Lancaster County, it seems, has bought a great many tons of salt during the last six years which moves in solid trains.

This particular shipment which caused all the celebration made the run of 385 miles to Lancaster County in twenty-four hours, and the salt was packed in barrels, boxes, cartons and every other kind of package possible to imagine.



THE SIGHT OF A LIGHTED WINDOW LENT STRENGTH TO HIS TOTTERING LEGS

Ridin' Wild

The First of a Group of Tales Heard in the Shanty Down by the Main Yard Lead

By Gilson Willets and Gene Clark

A MAN battled his way up the tracks through drifting snow and piercing cold. In the distance a little switchman's shanty withstood the howling wind that swept down from the mountains driving the snow through every crack and crevice. The approaching man could dimly discern the near-by red and green switch lights, but the sight of a lighted window in the shanty lent strength to his tottering legs. He knew what was inside—warmth, food and companionship. He pulled his ragged garments tighter about him, and with a hoarse croak rushed blindly to the door, fumbled a moment and flung it open.

He saw a group of roughly dressed men huddled about a glowing cast-iron stove. They looked up inquiringly.

"No bums in here," growled one. "Clear out!"

"Have a heart, boys," pleaded the newcomer. "I know I'm a bum, but I used to be as good a 'rail as any o' you. I used to shuffle 'em right here 'bout ten years ago. All I want is a little bit o' heat."

"Sit down, old-timer," invited the man who had ordered him out. "I didn't mean nuthin'. You're all right. Awful night out, ain't it?"

The stranger shook off the snow that plastered him from head to foot and silently accepted the proffered seat.

"Switchin' must a' been some different when you wuz here, I s'pose?" asked one of the men.

"Yep," replied the stranger. "It wuz. They wasn't so many improvements then; no automatic blocks er double tracks, an' the stations twice as fur apart on the road. I recollect, though, of a wild ride down the mountain I had wunst, when the stations seemed purt' near as close together as the telegraph poles. That wuz the fastest ride I ever took."

The switchmen, scenting a story, shifted to more comfortable positions and listened attentively.

"Yep, railroadin' ain't what it used to be in them days," said the old-timer complacently, as he fired up a vile old pipe. "I think it wuz in the spring o' twelve or thirteen when I rode that runaway car down the mountain. I wuz field man fer ol' Tom Hooper, an' this wuz a club joy then.

"They handed me a flat loaded down with steel, an' I wuz to ride it down to the east end o' number one track. We wuz makin' up a eastbound symbol. I piled on an' sit down on the edge an' built a cigarette while she rolled down the yards. When I got up an' looked fer my club, it wuz gone! It had fell off!

"I set the brake with my hands, but it didn't do no good. She kept right on rollin'. I looked back an' the engine wuz out o' sight behind the icehouse, an' they couldn't hear me yell, an' it wuz too fer away fer me to run back after the engine, so's they could ketch it. I pulled on that brake till I thought I'd bust, but it didn't help any.

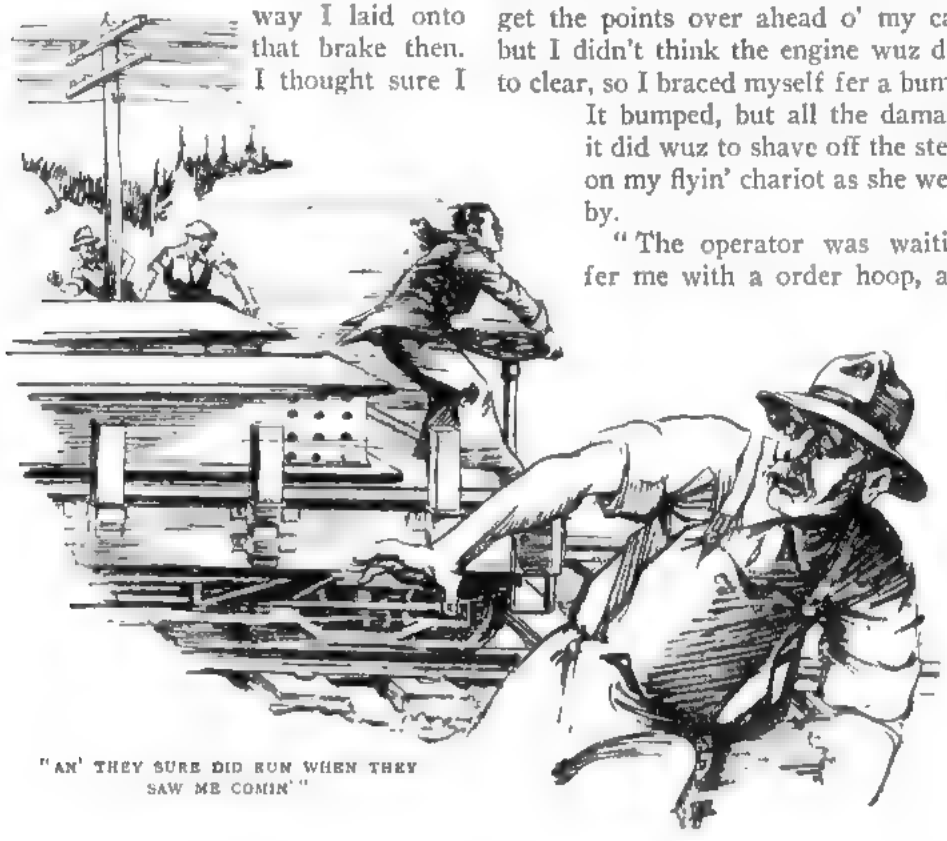
"I got off an' run ahead an' got boards an' chunks o' wood an' rocks an' everything else to put under the wheels, but she wuz too heavy. The forty er fifty tons o' steel smashed everything just like eggs. I tried every way I knew how to stop her, but she went through the switch an' down the main line at about ten per. They wuzn't no passenger trains due in fer over two hours, an' I didn't know if they wuz any drags comin' er not, but I knew if they wuz, they'd be smeared all over the country.

"I thought maybe I could keep her down slow enough at Parker—the next station down the line—so's I could run ahead an' throw the mill spur switch. That would throw her off in the mill pond. I looked fer something to use fer a club, but all I could find wuz a piece o' one by two, an' that broke in two right off. In spite of all I could do, she wuz rollin' about twenty er twenty-five when we got to Parker, an' I couldn't run that fast. I yelled to the operator as we went by, an' told him to wire ahead an' ditch us at Freeman—the next station. I could get off any time without gettin' hurt, barrin' maybe a scratch er two. I s'pose the wire wuz busy er sompin', 'cause when I rounded the curve this side o' Freeman, I saw the operator runnin' like the devil wuz after him, tryin' to get to the passin' track switch ahead o' the car. He had 'bout a hundred yards to go. It looked like it 'ud be a tie.

"Well, he beat us by 'bout a car len'th, but his key stuck in the lock. He sure looked scared when I went by. I had a notion then to jump, but they wuz a mile er so o' upgrade, a couple o' miles further down, which would slow her up considerable, an' I might be able to stop her. They wuz a couple o' scared lookin' females on the platform at Freeman when I went by, an' I waved an' grinned at 'em. I s'pose they thought I wuz crazy.

"Well, the little piece o' grade slowed her down some, but not

enough. She wuz goin' 'bout eight er ten, I s'pose, when she got 'bout a couple hundred yards o' the top. I saw a little piece of board a little ways ahead an' I piled off an' got it. It sure wuz a caution, the way I laid onto that brake then. I thought sure I had her, the way the brakes wuz squeakin' an' stutterin'; but she kept creepin' an' creepin' till she finally got to the hump an' started down again, so I let her go. They wuzn't any use strainin' fer nuthin'.



"AN' THEY SURE DID RUN WHEN THEY SAW ME COMIN'"

"When I got out o' the cañon, so's I could see Stanley, the next station from Freeman, my hair stood straight up! There wuz a long drag, just backin' into the clear, with the engine an' maybe seven er eight cars still on the main, between me an' the switch!

"Lord! How slow they wuz goin'! I could see the shack givin' frantic back-up signs to the hoghead, but he wuz givin' her all he had. An' the blamed flyin' machine I wuz on seemed to be tryin' her durndest to beat 'em to it. The shack managed to get the points over ahead o' my car, but I didn't think the engine wuz due to clear, so I braced myself fer a bump. It bumped, but all the damage it did wuz to shave off the steps on my flyin' chariot as she went by.

"The operator was waitin' fer me with a order hoop, an' he gave me a high ball. I s'pose he thought if I said 'Whoa,' the blamed thing would stop! I picked up the order, which said I had a clear track to Hastings—which wuz about forty er forty-five miles away. I guess the dispatcher thought he could save some coal by coastin' 'em down hill! It wuz about twenty-five miles to Belmont—at the bottom o' the hill—an' then they wuz about twenty miles o' level track to Hastings. There wuz a message from the super with the order, an' he said that the car o' steel

wuz very important, an' he wanted me to stay with it. I did!

"I wuz out o' the mountains now, an' wuz coastin' down the foothills. They wuz only one bad curve, 'bout ten miles away, an' I thought maybe she'd stick to the rails. A box car or an engine never would, but as low an' as heavy as the flat wuz, I thought she had a purty good chance. I got busy with my board an' tried to shift some o' the big beams over to the left, 'cause the curve wuz to the left, an' all the weight I could get on that side would help just that much to hold her down. An' the way that car rocked!

"I kept watchin' fer section gangs, 'cause I'd be on 'em before they knowed it, lessen they could hear me yell. I finally come to a bunch workin' on the bridge over Stymie Creek, an' they sure did run when they saw me comin'! They all got across but one, an' he couldn't make it, so he jumped off in the water! It wus only 'bout thirty feet high, so I guess he wuzn't hurt much, but it sure made me laugh to see him sailin' through the air, all spread out like a flyin' squirrel.

"When I got to that bad curve out o' Vesper, I started to pray, fer she wuz travelin' 'bout seventy-five or eighty, I s'pose. She started to lurch as she went around the curve, an' I thought, every lurch, she wuz headin' fer the country. Then the inside wheels started to raise from the rails! The left side kept comin' higher an' higher, till I thought sure she wuz goin' over. Then, all at once, when she reached the straightaway, *bang!* went the wheels, down on the rails agin!

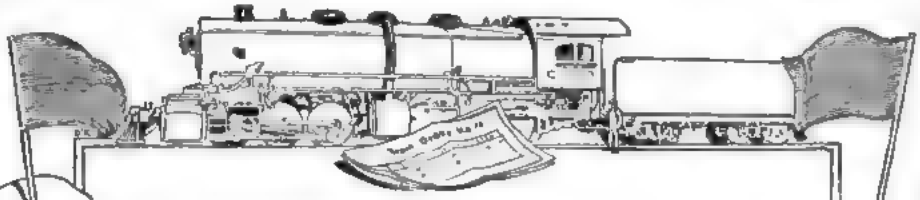
"The jolt like to jarred my head off! An' then talk about travelin'! If I'd had a gun an' shot ahead, the bullet would 'a' come back an' hit me! The telegraph poles begin to look like a picket fence! I had to sit down so's the wind wouldn't blow me off. It sure wuz a wonder that that car didn't get some hot boxes, as heavy as she wuz an' as fast as she went. When I went through a station it wuz just a blur; I couldn't tell whether it wuz a man er a cow on the platform.

"I went through Belmont like a dream in the night—er a nightmare, I s'pose, would be more like it—fer she wuz rattlin' an' jumpin' like a Salvation Army tambourine. The westbound local wuz there, an' they wuz all out wavin' like a bunch o' wild Injuns, 'cause o' the way I wuz ridin' the car.

"My coat tails wuz flappin' an' crackin' out behind like a gun, an' they finally frazzled off clear up to the middle o' my back. I heard, wunst, that when anybody wuz fallin' a long ways, they got dizzy an' went unconscious long before they hit the ground. I used to wonder how anybody knew, but now I know that a wind blowin' over a hundred miles an' hour would blow anybody's brains out. Everythin' seemed to be so peaceful, an' I thought I wuz havin' a happy dream, just like takin' gas to git a tooth pulled.

"I kinda had my doubts o' the car stoppin' inside that twenty miles to Hastings, but she finally did, 'bout a mile out. Then I got off. I wanted sumpin' solid to sit on! An' I stayed there till they come an' got me. That wuz the fastest run ever made down the hill. They wuz a station just five miles up the hill from Belmont, an' they said I made it in three minutes, flat! 'Course all they had to go on wuz the operator's time, but I guess they wuz correct.

"That ride, boys, wuz the cause o' me quittin' railroadin', an' made a bum out o' me. Now, is they any o' you fellers that 'd stake me to four bits?"



Are You Getting Ahead On Your Job?

If you are not, you are failing to take advantage of the exceptional opportunities in railroading to-day. You may have a problem to make the next job ahead of you, but RAILROAD MAN'S MAGAZINE is going to help you. In the February number, out February 1, we begin a new department—

"MAKING THE GRADE"

By the Promotion Pilot

Helps for those men and women who want to help themselves!

Are you dissatisfied?

Do you feel you ought to make a change?

Do you feel that you're being overlooked?

Do you want to step ahead of the parade?

In this department we are giving you an opportunity to help yourself to a bigger and better job, by inviting your confidence and offering you the aid of experts.

Just write it down and send a stamped envelope for reply to

"The Promotion Pilot"

RAILROAD MAN'S MAGAZINE

And watch for the February number when this department is scheduled to take its place on the RAILROAD MAN'S card.

EVERY THREE MONTHS THE SECTION FOREMAN CUTS MY HAIR AND I CUT HIS

Luther Leghorn

The Author of "Observations of a Country Station Agent" Presents the Monologist of Lone Oak

By J. E. Smith

I AM a telegrapher. Seven years ago they made me agent of the X. Y. and Z. Railroad at this country station of Lone Oak. A friend advised me to take the job. He said I would meet people and have experiences that would bring me to the fore. If I am here at the end of another seven years, I am going to send him a picture post card, if I have not forgotten how to write, and thank him for his words of counsel.

Life is easy in Lone Oak. You can cross Main Street afoot any hour and live to tell it. I have learned that where there is too much ease a man deteriorates which has something to do with what I shall tell you in the pages that follow.

In Lone Oak we have a sawmill, a grain elevator, two coal dealers, and several stock buyers—not buyers of motor or radio stock, but of live stock. I let my whiskers grow, because we have only a part-time barber, who vulcanizes tires in between haircuts. If he cuts you, he uses tire tape and rubber compounds on you, because they are handy. I don't care to be tonsured with tire paste, so every three months the section foreman cuts my hair and I cut his. That is coöperation. The railroad wants all employees to have it.

I am inclosing my picture. It was taken last spring by a section hand,

who drew a camera in a church raffle His ticket set him back ten cents. The ten cents went to a good cause—heathens, or education, or something

I look a bit pop-eyed in the picture, but that is because the light, the angle, or the focus wasn't just right. I look a little scared and serious, but I understand that after seven years all agents look that way. Perhaps your magazine can doctor it up some If you can make my face look like Hollywood, I will buy a few extra copies and sent them around

I wonder how many, looking at this sketch, will say:

"There is a c o m i n g agent. He may be president of the road some day. Watch him!"

To all such I want to say right here that if any one watches for me to rise he will get a crimp in his focus and a crick in his neck In my make-up they left out the saccharine, fruit juice, malt wort fungus fermentation, commonly known as yeast. I put it in this way to let you know that I am not so slow, even after seven years as agent at Lone Oak Rising in my chosen vocation, however, will not take place as long as old Hicks is superintendent of this division. He is prejudiced against me

As you know, little circumstances often start men on their way to destiny. Little circumstances may stop them, likewise. Take it from me. Here is how and why:

J. E. SMITH CREATOR OF LUTHER, AND FAMED AS AUTHOR OF "OBSERVATIONS OF A COUNTRY STATION AGENT"

Last winter was cold, perhaps you remember. This summer was hot. I know you have not forgotten that, but no matter. Last winter I got chilblains, medical name *pernio*, frostbite My feet swelled up and burned. I used iodine, ichthyol, and tincture of camphor, but nothing helped them much. They itched all the way up to the hot spell, and the hotter it grew the itchier they were

I read up on chilblains The book said that "hosiery should be changed whenever moist." Some people's hosiery may be dry, but mine is always moist, and this meant that I would have to

change socks every thirty minutes by Central standard time.

Here was a perplexing dilemma. I figured that the socks trust got that into the book; so I beat their game by putting aside my shoes and going barefooted. Other distinguished citizens of this town go barefooted. Squire Jones never wears shoe leather from June 1 to October 1.

"You got to take care of the tarsal and metatarsal bones and the plantar ligament," he says, "and freedom of movement aids the cartilage elasticity."

That sounds wise, like Professor Bones himself talking; so I gave my toes and arches the air.

IN THE RAW SNAPPED BY A SECTION HAND

I pause here for a modest personal announcement. I have some accomplishments. I play the mouth organ. I have never taken lessons of the great Piccolo de Nutti of Vienna, but around the sawmill I get a swing on the "Virginia Skedaddle" that is always good for a hill-billy encore.

Here is what happened:

It was a hot day. I sat tilted back in my office chair, not having much to do at the moment, and elevated my free feet to the telegraph table where the cool breezes off the tall corn toyed with toes Nos. 1 to 10. I felt fine, so I lolled back, whipped out the old mouth organ, and agitated the circumambient with my stirring repertoire. My big toes wiggled away in rhythm with the swing and cadence of the spirited melody. Big toe accompaniment is something new in music.

At the end of the second or third masterpiece I became aware that I had an audience. I did not know that any one was about, as I had not heard any one enter. I just sensed the presence of others.

I slowly turned my head. There behind me stood Superintendent Hicks with two other officials. They had slipped in on a motor car.

"That is not so bad," said Hicks, but without much enthusiasm. He roved an eye around. "Things are none too clear here," he continued. "Where are your shoes?"

I explained to him about the chilblains.

"I see you haven't shaved for a year or two," he added.

I told him about the vulcanizing barber.

"Haven't you ever heard of safety razors?" he asked.

I told him I had carefully read all the literature and had posted every bulletin the company had put out on safety, but if safety razors had ever been mentioned, I had failed to see it.

He did not brighten up any at that one

"It strikes me that it's time to have this joint cleaned up, and that includes the agent," he announced grimly.

With this he went out, and the party proceeded on its way.

From the tone of the conversation I rather gathered that he did not like my *tout ensemble*. My impression was confirmed a few days later, when the trainmaster got off the local and said he wanted a few words with me privately.

"The boss says you are to wear shoes every minute you are on duty" he told me. "You are to shave clean

two or three times every week. He says you are degenerating. In another year you will be climbing trees and hanging on with your prehensile toes to pick insects and fruit. He is going to close the zoo."

The trainmaster cackled at that, and left.

II

My whiskers gave a departing flap. My big toes curled up, and it came to me that I never would be president of the road.

Like all faithful railroad employees, I blamed everything on the management. They had sent me into the wilds and kept me there, and then had found fault with me because I had been subject to the natural law of reversion to type. We are the creatures of environment, all of us. We go along and are influenced by what is around and about us. I get this from Darwin. Lone Oak was heading me for the primitive. While that was true, I resented being told about it by any half baked trainmaster who knew no science, and whose only idea of evolution is that there once were links and pins, while now we have the automatic coupler.

Dismissing natural science, however, this fact stood out—a royal ukase had been issued to me through the T. M. Whiskers off—shoes on—such was the official order. My first impulse was hot resentment.

"Is this Russia or free America?" I cried indignantly.

As I recall further, I breathed deeply and pounded my hairy chest; but there was no answer. Even echo was off the job.

We railroaders are quick to rebel against authority. We roar protests and hurl anathemas. We will be damned utterly, and by the gods we will not conform. We bawl out defiance, and then we go meekly along with whatsoever was ordered, as if we had never uttered a word of protest.

After the emotional tempest had somewhat subsided, it came to me that I was marked for extinction, and that jobs at this time were none too plenty.

The whiskers came off. That leaves George Bernard Shaw almost the sole surviving specimen in the world of letters. I was probably the only one in free Indiana. Now I am shorn and have talcum on each cheek. I wore whiskers two years or longer. They were not laundried, wet washed, or dry cleaned every day. At times they got tangled, and again they flowed freely, like the vagrant thoughts of a poet and philosopher—which means myself.

Once started, I went further. I cleaned up the old depot. You would not know the place. Lye, soap, broom, mop, muscle—what a quintet, what a quintet!

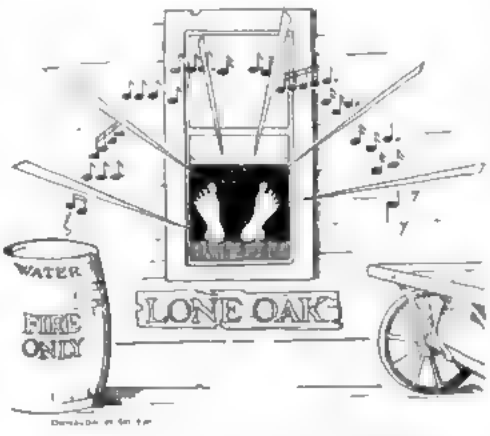
Then the section foreman let me know that there was to be an inspection of the road. The general manager was coming down. Everything had to be spick and span and in shipshape condition. The local superintendent must stand well with the general manager. When the latter formally visits a division, everything must be done to give him the best impression, and for such occasions there is a general clean up.

I was trucking ten bundles of green hides when a vagrant thought came my way. Green hides have the scent of an earlier civilization. Just why, in whiffing their effluvium, I should have lofty mental exhalations was at first beyond my rudimental psychology; but there I was in full inhalation, and thinking of pomp, parade, and display. Hold—I have an idea! There were two brown, three red, two black, and three white

cowhides. There you are, a chromo-lithographic suggestion! That is subtle mental science for you.

I could not possibly repaint the depot. There was no time for installing geranium beds and hydrangea or spiræa trimmings. Why not adorn the agent himself in splendor and class?

Whew! Who am I to be trucking ten bundles of green hides? Here I was with whiskers off, shoes on, and well on my way back to the social culture of civilization. Superintendent Hicks, when he caught me in the wild, had passed me word that I must head in the other direction. Here was a fine chance to show him how well his advice had been followed.



BIG TOE ACCOMPANIMENT IS SOMETHING NEW IN MUSIC

Bear with me while I elaborate this thought. Here was I shaved and shod, five feet ten, one hundred and sixty pounds, Jones or Fairbanks, Toledo or Dayton; but I was no particular ornament to the surrounding scenery. Here was a raw, unadorned human body, male, conventional clothes, baggy, seedy, soiled, sans color, snap, and starch. The figure is not much to observe, much less to admire, in any combination of natural views. My thought was that it should be adorned for the inspection.

Superintendent Hicks had seen me at my worst, he shall now see me in my best. We would impress the general manager with the proprieties down in the hills of old Jennings County, Indiana. He should see one employee so sartorially habilimented as to make him gasp. I would redeem myself in the eyes of Superintendent Hicks.

After all, I might fit in with the company's promotion schemes. Some day the world may read that "Luther Legborn commenced his railroad career in Lone Oak, down in the Hoosier hills." How often we find some such passages in the lives of the great and illustrious—"He commenced his career in Tadpole Center," or "He made his first twenty-five cents selling night crawlers." It is the way with nobility to view the gap from poverty to nephritis and hypertrophy with self-satisfied complacency. Let 'em view! On with my story!

This brings me to the Baxters. You may hear more of this interesting family in the course of these memoirs. When they come and go, the society pages take note. They have a summer home in the wilds overlooking the sinuous Muskatatuk River. It is known as The Lodge. The adjacent scrub woodland is a game preserve, and a scattering cut-over tract is a bird sanctuary. That is the sort of people they are. Nicobar Noble, who has the next eighty, sweats at it, and has a mortgage that names it as "a parcel of land." Such are our countryside distinctions.

Bill Baxter, a worthy son, who has been a student in an Eastern college, is home for the summer. He is about my build and height. I asked Bill if

he would loan me his dress suit for one afternoon.

"May I ask," returned Bill cautiously, "what is behind this rather extraordinary request?"

I explained to him my previous humiliation. Now that the general manager was coming down, along with the superintendent and other officials, I wanted to meet the party in state.

Bill leaped at the idea, or rather he catapulted into it

"Bully!" he exclaimed. "Tuesday, around 2 P.M., you say? I'll be right here with the outfit at noon. High-hat 'em, old boy, high-hat 'em! Altitude is the caper. Look down on 'em!"

Bill grew enthusiastic. I tell you, that boy is getting something out of higher education. He is not the type that comes home and tells you about all Gaul being split three ways, or quotes some wise crack from Epictetus. He knows modern stuff. "Scat 'em! Sick 'em! Eat 'em!" Say that fast, and it sounds like Greek. That is near enough the classics for Bill.

"Be stiff and formal with 'em," he continued. "Don't say much yourself. Be reserved. Listen to 'em with dignity. Self-restraint is the ticket. Be sure to look the part. Appearance is the whole thing. You are going to look like a member of the Cabinet. If you chatter, you spoil the effect. Do you get me?"

I nodded a decorous assent.

"It is ninety per cent appearance and ten per cent talk," I added, to show him that I had the correct analytic ratio in my mind. "I have you, Bill—I have you!"

Bill slapped me on the back.

"You're on, old boy! It's up to you to act the part. This is going to be good! Tuesday noon, my Lord Chesterfield, I'm here with the correct habiliments. The officials are due at two o'clock. It will not spoil the picture if I drive up in my new Cadillac as the special comes to a stop. That will add color, and we want all the class we can get."

Bill gurgled, not coarsely as of the hills, but with the modulated chortle of culture. I haw-hawed as of the railroad.

"Tone that down," admonished Bill with a wave of the hand. "Commence right now!"

With that parting caution he drove away.

III

BILL evidently kept close watch on the sundial in his father's sunken garden, for at high noon on Tuesday, to the minute, he drove up with bundles enough to start a shop. He took infinite pains, wherein they say lieth genius. Full dress outfitting is no small task. No working railroader wants it as a daily performance, I am passing out the word.

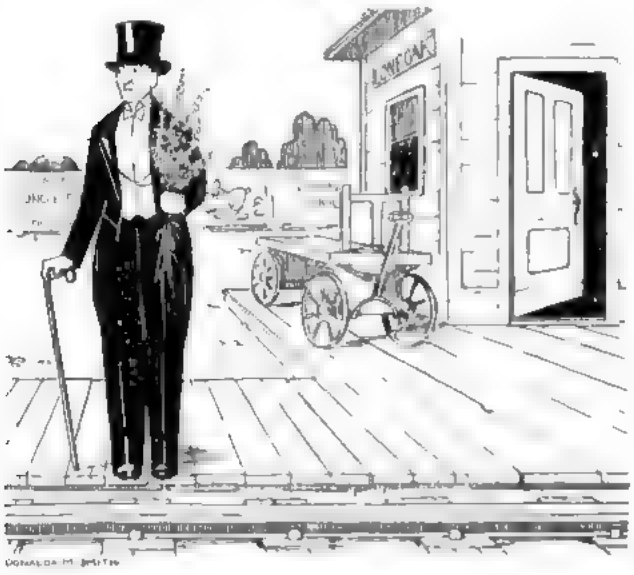
In the details of adjusting and fitting, Bill kept up a running comment on some professorial advice that he had plucked from the college caldron.

"It's this way," he sagely observed. "To go to the top you've got to impress others. You've got to have the epaulets and the pompons, along with the bearing and the deportment to back 'em up. Old scout, you are it!" he added enthusiastically. "Here's where we try it out, and where Luther Leghorn takes his first step upward!"

I was not entirely clear as to the ultimate result, but I knew we were making an actual test of some psychological hypothesis. I was a bit hazy, but Bill seemed to understand. They can try out any kind of serum they want on me. I am just that brand of

a hero, particularly if it will advance Bill Baxter's education, and by the same experiment start me toward better pay.

Here we were almost upon the testing moment. The general manager's special was out of Seymour. At two o'clock it would reach Lone Oak, the next stop. The operator at Seymour passed me word that from highest to lowest there were about twenty in the party.



A STATELY FIGURE TOOK HIS STAND ON THE PLATFORM

At three minutes to two a stately figure took its stand on the platform, toward the receiving end, well detached from the sordid surroundings of the building. He held in one hand a fine bouquet from the Baxter gardens. This was to be handed to the porter of the train for the general manager's desk, to be a lingering reminder of the donor.

"Stiff! Head up!" were Bill's last words as he made for his car parked a block away.

As the special came to a stop he was to drive up in his classy outfit, mingle with the guests, and prompt his protégé in whispers. Where it was possible, he was to drop commendatory hints and suggestions like seed to the soil. Bill is a wonderful student. Not many of them continue their school work in their vacation days.

While I waited in solitary splendor, I had some serious thoughts. How would Superintendent Hicks take this? What sort of a personality was the general manager? Was he likely to have a sense of humor?

The wretch in the chair, when the button is about to be touched, reflects on the past. I had two minutes yet, so I went in the other direction. How about my future? I wondered if Bill had overlooked anything in his blue prints.

Too late now! There was a speck of smudge in the distance, and the general manager's special approached.

Again I say the special approached. There was one long toot for the station, then four toots for the Main Street crossing, and then—

Hank Hines, the hero of the throttle, never shut off. He split Lone Oak at sixty per. There was a mighty rush and swirl of air, like the breath of a West Indian hurricane. The Prince of Punjab grabbed for his high silk hat, and the petals left the delphiniums he was gripping in his off hand. The prince's trachea went into paroxysms from the simoom of dust.

The special had arrived and departed.

Good friend Bill did not drive up. He came slouching up ahoof, lighting a cigarette on the way. I remained statuesque. He coolly looked me over. I was waiting for a wisecrack.

"Well, I'll be damned!" he observed, directing a look down the track in the vanishing direction. "Was that Biela's comet, or Halley's?"

"That," I retorted gravely, "was fleet-footed Mercury, the messenger of the gods!"

"They're gone," sadly ruminated Bill. "They didn't stop. Our show was a dud."

I returned a few dignified words, admitting that I, too, had noted that they did not honor us with their presence.

My observation made no hit with Bill, however. For a moment there was silence, as we looked each other over and sought vainly for words to fit the miscarriage.

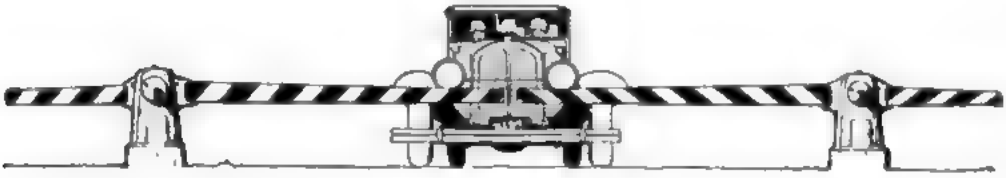
Then the procession moved into the depot.

After I had changed into my working clothes, I went with Bill to his car.

"Well, anyway," he said, "no doubt they got a glimpse of you. They probably thought you were a black creosoted whistling post. That wasn't much of an impression to make on 'em!"

I didn't retort, for I had no retort ready.

I went back to my office desk, to work on my demurrage records and reports, which have had no attention for ten days. The auditor will be letting out a squawk to the superintendent, and I would rather not have any further complications for the time being.



FARMER A HERO

H. F. BEMIS quit the Illinois Central Railroad, where he served as a conductor, and said that he was all washed up with the railroad racket. That was back some few years ago. Conductor Bemis bought a farm out in Kansas, near the Frisco main line, and, in fact, he built his farmhouse only a few yards away from the edge of the ballast. In Mr. Bemis's opinion it was all right to quit the railroad, but it wasn't all right to get too far away from it.

Mr. Bemis got much joy out of sitting on his porch in the evening and watching the hot manifest runs thunder by. One night recently No. 332, time freight, highballed down the main line. Ex-conductor Bemis, listening, as he always did, to the roar of the drag, was startled to notice an unusual sound. The train went by and Mr. Bemis went to investigate. He found a broken rail.

He jumped into his automobile and raced to the next open telegraph office, where he reported the bad track, and then he raced back home again, where he flagged No. 335, another hot shot. Which all goes to prove that you may take a man from the railroad, but you can't take the railroad out of a man

WESTWARD MAIN TRACK UNDERCROSSING THE FREIGHT TRACKS AT DENVILLE

Four Tracks

Lackawanna Engineers Had to Overcome the Obstacle of Their Own Main Line in Big Expansion

By George L. Cassidy

RAILROAD engineers have long been accustomed to overcoming obstacles. When they couldn't lay rails around or over, they learned, as a matter of course, to put them through, even under mountains.

But in the old days the barriers were usually those placed in the way by nature They were such tribulations as rivers, swamps, and rocky upheavals The rails set out by the roadmakers themselves were not numbered among them

Yet the engineers of the D. L. & W. not long ago completed a job that involved just that difficulty. The railroad's own tracks formed the blockade that had to be overcome. And, although, within recent years, similar problems have been solved elsewhere in much the same manner, the D. L. & W.'s task was distinguished by still another unusual feature.

Not only was the track carried under three others, but the track so treated was a track of the main line, a most unusual procedure from an operating standpoint Local conditions virtually dictated the building of an underpass in connection with the third and fourth tracking of the main line from Boonton to East Dover, a distance of about eight miles

The Boonton stretch is part of the main line from Hoboken, the Lackawanna's tidewater terminal, to Buffalo It was first laid out about 1870, with two tracks used principally for freight The area through which it

ran was by no means thickly populated. For the first few decades, a four-track system was needed only to a point within about five miles of Hoboken. At the conclusion of the World War, however, residential sections began to grow rapidly, and within the last ten years, two new sections of the line were given four tracks: from Lincoln Park to Boonton and from Lyndhurst to Paterson.

The growth continued. Between Hoboken and East Dover the population of the sixteen towns along the line, among them such larger places as Passaic and Paterson, multiplied under the spell of real estate development, providing heavier commuter traffic to demand more passenger trains. And meanwhile, passenger and freight trains continued to share the two tracks between Boonton and East

HOW THE ENGINEERS SURMOUNTED THE OBSTACLE OF THE ORIGINAL MAIN LINE BY UNDERCROSSING

Dover. The grade was high, so that a loaded freight sometimes made slow work of it, and passenger trains had to be scheduled with the utmost care to avoid being held up by the slower carriers. From every point of view, it seemed important to get more room. The order was given to put in two additional tracks.

In the system that had been constructed from Lincoln Park to Boonton, the two outside tracks were used for passenger traffic and the two center tracks for freight, as was the practice wherever there were four tracks on the line, and it naturally was decided to keep the two kinds of traffic separate on the new section.

Had conditions been ordinary, this would have been simple enough to do, but conditions were unusual and demanded unusual treatment.

On the left side of the Boonton line, or main line, going west from Hoboken, and a little beyond East Dover, lies the yard where the passenger trains are made up. Also on that side, about three miles toward Hoboken from East Dover, is the Denville station, which is just east of the intersection of the Morristown branch, a loop that reaches the tidewater terminal by way of Morristown and Newark. It is heavily traveled by commuters almost to the exclusion of freight.

With such a situation, to extend the third and fourth tracks from Boonton to East Dover in the same manner as they ran from their beginning to that point—one on the right and one on the left of the freight tracks—would have presented a serious disadvantage from the point of view of efficiency.

Passenger trains bound for the East Dover yard would have had to cross both freight tracks on grade to get there. This would mean that passenger trains frequently would be held up while fuming riders counted as many as eighty cars as the through freight pulled by, and the schedule in the yard, where Morristown branch trains also are made up, would be disrupted. Thus the very service the new track would be laid to provide would fail.

To discard the East Dover yard altogether was not considered economical, for such a step would have meant creating new yards or enlarging others farther removed from the intersection of the two lines, with a consequent reduction of operating efficiency.

Problem of Underpass

Only one plan seemed to fit the requirements. It was to carry the new westbound passenger track from the right side of the freight track by an underpass to the left side and into the yard. By making the underpass at a point some distance from the Hoboken side of the Denville station, the plan had the added advantage of allowing both passenger tracks to run directly past the platform, with the result that the passengers would be spared the trouble of crossing the eastbound passenger track and both freight tracks to board a westbound train.

The job of putting in the two new tracks cost more than two and one-half millions of dollars, a sum sufficient to provide several very comfortable fortunes indeed, although not stupendous in this day of thundering big figures. The number of dollars expended, however, does not reflect what happened in the scant fourteen months that went by before the job was finished.

In this case the task involved not the simple extension of a system, or the mere replacement of rails, nor even the taking up and laying down of a considerable section. It meant taking up

nearly two miles of a main line, shifting it some distance, changing alignments to ease existing curves, raising the roadbed, placing new tracks, building five highway bridges and three railway bridges, constructing several culverts, and blasting away part of a hill.

To do all this and nevertheless maintain service required ingenuity and, at certain times, remarkably speedy action.

Chief Engineer J. G. Ray and his staff went to work and laid their plans so that the whole job was done with the utmost smoothness. A. J. Neafie, Mr. Ray's principal assistant, had general supervision, in addition to being in charge of all track work; M. H. Doughty contributed as division engineer; J. L. Vogel designed the bridges; Meyer Hirschthal saw to the concrete; and Alfred H. Henckel dealt with the burdens that fall to the man in command of operations in the field.

By use of temporary tracks to bypass sections of the existing two-track line that were realigned to ease curves, the additional third and fourth tracks were built from Boonton to the site of the westbound underpass without causing any appreciable delay to traffic, the new tracks being laid sometimes on one side and sometimes on the other of the old and then being connected in the usual manner. Always, however, when the connections were made, the freight tracks were maintained in the center.

A VIEW OF THE CONSTRUCTION DIFFICULTIES UNDER A TOWN'S MAIN STREET

A point about half a mile from the Denville station in the direction of Hoboken was chosen as the best site for the underpassing of the westbound passenger track. In order to put in the bridge for the two center freight tracks, it was necessary to cut through the existing embankment at approximately ground level and to raise it several feet so as to give overhead clearance for the passenger trains beneath. Since it was desirable to do the work without materially changing the exist-

ing grade, it was necessary to take out the two old tracks and replace them with new ones at a different alignment.

To put the two old tracks out of service without interrupting traffic meant that new tracks paralleling them must be made available. The new eastbound track was connected with the old a little less than half a mile from the site of the cut and was carried past the Denville station to East Dover where it was brought into the old track. Just a little east of the Denville station, the Rockaway loop joined the old westbound track.

The new westbound track, already built from Boonton, where it was temporarily connected with the old westbound track, was carried on to connect with the Rockaway loop. There another temporary connection was made with the old westbound track. By these connections, a westbound train could enter the new track near Boonton, travel almost parallel with the old track to within a short distance of the Denville and there go back again onto the old track. In like manner, an eastbound train from Dover could swing onto the new track and thence go through to Boonton without a stop.

Begin on Bridge

In the meanwhile the sections of the old track thus by-passed were taken up and the cut through the embankment was made. The engineers then began work on the bridge itself. They made a virtue out of the need for high embankments, which would carry the freight trains to the bridge over the cut, by building two boxlike structures of reënforced concrete into which the embankment fill immediately adjacent to the cut was packed. These boxes, capping the ends of the embankment, each consisted of a reënforced concrete abutment and floor and two walls of the same material. They formed tremendously strong foundations into which to fit the girders bearing the bridge roadbed.

The whole bridge needed to be strong, for over its fifty-eight-foot span the heavy freight trains of a busy line were to pound day after day. Every precaution was taken to see to it that none of the materials was weak or improperly prepared. Samples of each pour of concrete, for example, were taken from the forms and tested. Sand was given colorimetric tests for vegetable matter. Gravel and rock had to pass rigid inspection. The very water used was subjected to analysis.

When the bridge was complete, the embankments built to the required height, and the new freight tracks laid, the final section of the westbound track was placed through the cut at an angle of nineteen degrees and connected with those sections already built. It was then a simple matter to discard the few temporary cut-ins joining the outside tracks to the old center tracks and to throw the whole four-track system into use.

But although the westbound underpass was the most striking feature of the third and fourth tracking of the Boonton line, it was not the most laborious from the point of view of the men who did the actual construction, the field engineers, foremen and laborers. These met their hardest task at Boonton itself.

There a highway bridge carried Main Street over the two original tracks. Side clearance enough to permit the building of two more tracks under the span simply did not exist. By arrangement with the local authorities, the railroad carried another highway over the tracks and reconstructed

the Main Street bridge to give some additional side clearance. Not enough, however, could be made at the roadbed level without changing the grade of the street, so that it was necessary to sink the tracks about three feet

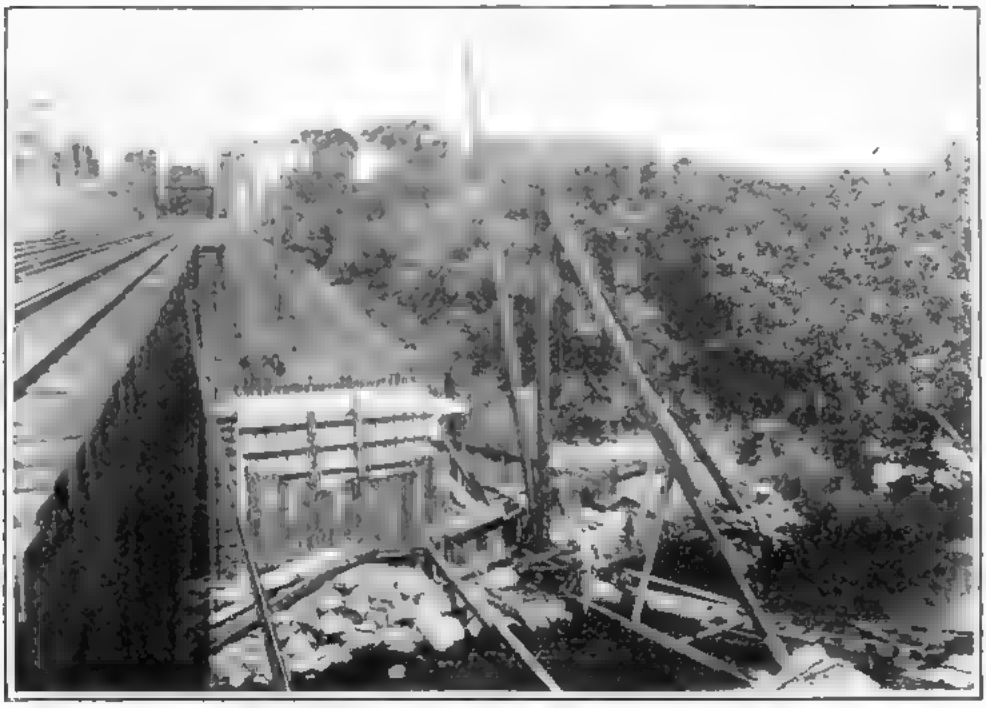
THE STREET BRIDGE AFTER THE JOB WAS FINISHED

Traffic Kept on the Move

In order to avoid tying up the existing tracks, two sets of two new tracks each were built. A man who stood with his back toward Hoboken as he looked in the direction of Main Street, just at that time, would have seen one of these sets of tracks paralleling the older ones on the right as far as the new bridge and the second set sweeping to meet them from the direction of Denville, parallel to the old tracks, but on the left of them and ending just short of the far side of the bridge. Not until the new tracks were so far in place could the old ones be taken up for realignment. Then, within a few hours, late one Saturday night and early one Sunday morning, the rails were lowered and one of the new tracks connected with one of the old to form a bypass. Then a section of one of the old tracks was realigned and lowered The next Sunday the second old track received similar treatment and the typical system was established: two freight tracks each flanked by a passenger track on the outside

The bridge for the highway paralleling Main Street was made permanent, much to the profit of the town's motorists; the rails went through, and the railroad increased its good will

The rock cut at Mountain Lakes also presented a problem that had its unusual features. There the original two tracks ran between a pair of hills composed largely of igneous rock; literally the roots of vanished mountains stick-



PREPARING TO CHANGE THE ROADBED OVER A STREAM

ing up through the glacial terrain. The way was wide enough to permit the original tracks to pass, but no wider. The contractor, as he surveyed the situation from the Hoboken end of the cut, saw that he must discover a way to blast out the face of the stone wall on his right without depositing a bowlder upon a passing train nor yet blocking the tracks. And there was considerable blasting to do.

Fortunately enough, the Boonton line did not always run through that cut. At one time a narrow gauge track ran around the hill to the left. And so, in coöperation with the railroad's engineers, a bypass was built along this old route with the comfortable result that trains passing that point were protected by a hill largely composed of granite while the blasting of the new way was going on.

But aside from the problems offered the engineers and contractors by track and hill wit-sharpeners, there was at least one other that supplied some sentiment, much irritation, a large expenditure of money, and caused a near tragedy which ended in farce.

This was the problem of the kettle-hole near Mountain Lakes. When Principal Assistant Engineer A. J. Neafie, who has served the Lackawanna for fifty years, was a boy, the kettle-hole was a pond. Many happy hours he spent there with a pole and a long line. And many catfish he drew from its muddy depths, little thinking that he would some day lay rails over his old fishing place.

But so it was. The pond has been gone this long time. The two tracks of the Boonton line have run across it for decades. Little trouble was anticipated in adding two more. Yet there was trouble enough. The new westbound track had to be laid across the uncertain ground and for that purpose

carload after carload of fill was dumped there. It sank, slowly pushing the mucky earth aside. More carloads followed, and at last it seemed the ground was firm and fit for tracks.

Fireman Made a Dive

Just to make sure, however, a call was sent to East Dover for an 1100 class engine, an iron horse that tipped the beam at one hundred and fifty tons.

"We'll take no chances," said one engineer. "If there's any give at all, the 1100 will show it up."

The locomotive drew up to the new stretch of track, paused, snorting, while its master, the engineer, learned his mission, and then began to cough into action.

"Say," said the fireman, "I don't like the idea of this. I'm not Lindbergh."

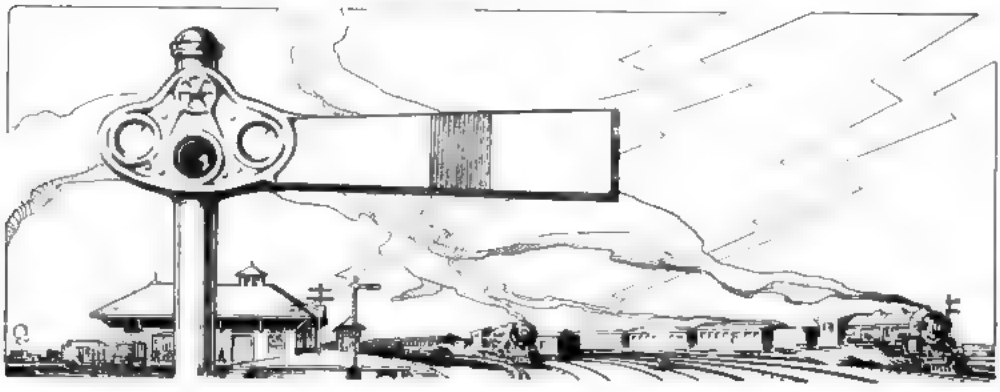
But nobody heard him above the grunting of the 1100. She steamed onto the new track cautiously and began to gather speed. Everything seemed to be going smoothly. Especially the track. The section ahead of the engine had started to ooze downward and to one side. Out of the cab came the fireman in a neat parabola that would have done credit to a flying squirrel He scrambled to his feet and looked over his shoulder, apparently expecting to see the locomotive diving for catfish. Instead, he saw her backing from the slipping track to the solid ground. The engineer had thrown into reverse in time.

After that, more than one hundred carloads of solid rock were dumped into the kettlehole. The yielding earth was displaced, forced from the hole so that it formed a towering heap beside the right of way. The track was relaid and No. 1100 went over it without revealing so much as a fraction of an inch of settling. Dozens of other heavy engines and trains have done likewise since. No change. Solid rock fill did the trick.

And so the third and fourth tracking job was done in typical railroad fashion, despite all obstacles. Altogether there were used 48,707 treated ties, 11,878 board feet of treated switch timber, 33,971.26 tons of rail, two number twenty turnouts, 4,154 Neafie joints weighing 297 tons, 90,944 tie-plates weighing 881 tons, and a suitable number of frogs, anticreepers, and bolts. There were shoveled into place 50,498 cubic yards of ballast, 64,971 cubic yards of earth borrow, 80,911 cubic yards of cinder fill, and 2,601 cubic yards of dry rubble. From excavations were taken 387,896 cubic yards of earth and 94,586 cubic yards of rock. In bridges and other structures were used 1,015 tons of structural steel, 210 tons of reënforcing steel, 26,400 square feet of reënforcing mesh, and 17,802 cubic yards of concrete.

In return for all the expense and labor involved in adding a total net length of 7.68 miles to the eastbound passenger track and 7.75 to the westbound passenger track, the Lackawanna has, it is believed, added greatly to efficiency of operation along the entire length of its Boonton line. Possibility of delay to passenger trains not only of this line, but of the Morristown loop has been cut to a minimum, ease of making up trains in the East Dover yard has been increased, and through freight trains bound to or from up-State cities virtually have been assured a clear track. Between Hoboken and the Port Morris yards, thirty of the forty-six route miles of line now enjoy four-track service, and additional mileage may soon be added.

MY GREATEST THRILL



A department where true experiences of railroad men are related. Prompt payment at good rates is offered for narratives of personal thrills. Each story must be verified.

NO DRAMA

By James W. Earp

I'VE had many thrills in my years of railroading, but the one thrill which will always be foremost in my memory came to me when I was but a boy visiting my Uncle Bill in Oklahoma. At that time he was a dispatcher, and every day at noon I brought him his lunch. More than once I stated my intentions of being a railroad man when I grew up.

"Why?" asked the chief dispatcher, Arch Campbell

"Because it's so dramatic," I replied, not being able to think of a better word to describe my reasons.

He shook his head. "No drama in the railroad game. Nothing but hard work."

I can still see Arch as he was that day, his cheeks fat and falling on each side of his face, his baggy trousers flapping like a sailor's when he walked, a day's growth of beard on his florid face, and his mouth full of plug chewing tobacco. Now and then he spit haphazardly at a cuspidor, and missed it five times where he hit it once.

Not at all the type of a man one would expect to be heroic. But then, neither was my uncle. My uncle was lamentably hump shouldered, and thin both as to face and hair. So was the wizened faced little fellow on the opposite side of the desk who rolled innumerable cigarettes with nicotine-stained fingers when not engaged in transmitting train orders.

Then the opening of the drama when the wizened face dispatcher rose to his feet, his eyes wide and staring, the half smoked cigarette dangled loosely from

lips that might have belonged to a dead man.

"My God, Bill!" he croaked hoarsely. "I've done it! I've done it!"

"What's that, Tom?" Uncle Bill was on his feet and at the side of Tom Luken in half a second. "What's that?"

"I've put 'em together. Oh, Bill, I've put 'em together."

Tom's pallid lips began to twitch. The nicotine-stained fingers gripped the edge of the desk for support, and tears forced themselves from under his closed eyelids and ran down his thin face as Uncle Bill ran questioning fingers down the train sheet on the desk. One glance was enough. He lifted his head to face Campbell, the chief.

"No!" said Campbell. "He didn't, Bill."

"But he did, Arch," replied Uncle Bill. "See for yourself. Lap orders."

Campbell's thick lower lip fastened under his teeth. His pudgy finger verified Uncle Bill's report with a single touch. Then he whistled.

"Sure did, Bill, didn't he? If his figures are right it ought to make them meet between Mounds and Red Fork."

"Oh, my God!" groaned Tom Luken. "I can't stand it, Archie. I can't stand it. I wish I was dead. I wish I was dead."

"Hush!" said Campbell softly. "Maybe we can fix it. Bill, take him into the other room while I see what I can do."

Uncle Bill obeyed. I glanced askance at Campbell. He nodded sorrowfully.

"Dirty mess, kid," he said to me. "Chances are they'll meet on the trestle out of Mounds."

A thousand prickly thrills went up and down my back. I tried to put a question and failed utterly. Campbell must have guessed the question, for he shook his head.

"I'VE PUT 'EM TOGETHER! OH, BILL! I'VE PUT 'EM TOGETHER"

"Not a chance," he replied. "Not a chance."

I watched him take down the phone receiver and call a number. What his thoughts were I could not guess. But there was no display of emotion. No hysterics. His voice was low and without a single tremor. An automaton could not have been less impressive in the rôle.

"Roundhouse," I heard Campbell's rumbling voice saying. "This you, Quinn? Get the wrecker ready and call the crews. Got No. 1 and No. 12 meeting about on the trestle at Mounds. Sure looks like a bad spill."

He hung up and turned as Uncle Bill entered the room. "How is he, Bill?"

"Bad," replied Uncle Bill. "I've sent him home."

"Damn shame," Campbell muttered while he called another number. "Wife in the hospital and baby born dead, and now—this." He whistled his sympathy and spoke into the phone. "Hello, doc! This is Arch Campbell. The plug and the limited are meeting on the main line about Mounds. Get all the sawbones possible, and nurses, too. Gonna be a bad mess. Sure, I'll give you plenty of coaches. And bring plenty of dope. Don't want them to suffer any more than they have to."

He hung up and scratched his thick neck as though wondering how best to handle the situation. My Uncle Bill was tapping softly on the telegraph key vacated by Tom, the wizened faced one. After a few seconds of this he closed the circuit and stood up.

"Not a chance," he sighed. "Thought maybe there might be. That's what they get for trying to save money. If Mounds was an open station we could stop them."

"How about a phone?" I suggested in trembling voice. "Have some one to flag the train."

Uncle Bill shrugged his rounded shoulders. "No phones," he said quietly. "Even if there were, we couldn't do anything. Only Indians there."

Campbell's eyes were on the standard clock. "Ought to be meeting in another five minutes, Bill."

I think I went sick then. In my mind's eye I could see the iron monsters meeting there on the trestle. Then the aftermath of twisted steel, the dead and the dying and the hiss of escaping steam.

The ringing of the phone made me jump. Uncle Bill took down the receiver to answer. I could hear a woman's voice. His replies were mostly monosyllables. When he turned back Campbell nodded knowingly.

"Mary Flynn?" It was a statement, not a question. "Sounded like her."

"It was." My uncle faced me. "Tim Murphy's bride to be," he explained. "To-morrow is their wedding day. Tim is the engineer on No. 12. I didn't tell her. It would have killed her."

"Yeh," broke in Campbell. "Better to wait until it's all over. Funny about women, but they can always stand the real things better than they can the suspense of waiting and not knowing." Another glance at the clock. "Ought to be meeting about now. Hope Tim Murphy sees them in time to jump."

Silence, except for the ever clicking instruments. Uncle Bill answered a call and settled himself to sending an order. His fingers were as steady as an iron man's, and his touch was sure. He sent with one hand while he wrote the order in a book with the other.

A shrill whistle cut the air about me. My heart almost stood still the while.

Campbell paced to the window and looked out.

"Wrecker," Campbell grunted, more to himself than to me. "Suppose I'll have to go with it. Just my luck to have this happen when all the big bugs were out of town."

A young man entered the room and conversed with Uncle Bill. Without ado he sat down to the desk vacated by Tom Luken and began to scan the order book and verifying it with the train sheet before him.

Timidly I touched Campbell on the shoulder. "Could I—may I go with you?" I stammered.

"Yeh, if you want to. Not a nice sight, though. Come along."

I followed his lumbering figure down to the depot. To my astonishment there was no frantic movements, no loud voices, no running wildly about. There was something almost uncanny in the way the nurses and doctors loaded into the cars. Not if I live to be a hundred years will I ever forget the unhurried yet efficient moving of those workers that day, the sight of the black smoke pouring from the wrecker's stack, the businesslike manner in which the men made ready for their gruesome job.

Nor will I ever forget the sight of that wreck and the groans of the dead and dying, the tenderness and the hurried labors of the doctors and nurses. The big, hulking figure of Campbell was everywhere, helping, giving orders, working like a Trojan. Unaided he did the work of a half dozen men when it came to prying men and women loose from twisted steel and buckled timbers. With his own arms he carried them to safety and then went back for more. His florid face was even more florid, and his face was a mass of knotted veins, but he never stopped until the last of the passengers had been cared for.

Tim Murphy had jumped. A broken leg and some smashed ribs were his, but he would live. I think I said a prayer of thanksgiving for that. The engineer died at his post on No. 12. The engine crew on No. 1 died to a man.

Back to town and a crowd at the depot. Wives, friends, sweethearts and curiosity seekers eagerly searching out for their loved ones, their eyes bright and shining, their fingers clenched in agonized suspense. Fear blanched faces and faces stained with tears, but no fainting women or screaming women. Men, too. But haggard of face and silent for the most part except for muttered sympathy and a tight handclasp on some comrade's hand.

Now a man was being lifted from a coach by two grimy-faced men. A madonna-faced girl pushed her way forward, hands outstretched toward the man on the stretcher.

"Tim," I heard her say. "You—you're all right."

The man smiled up at her despite his broken bones and pain. "Of course, I'm all right," he said. "You didn't think I was going to miss our wedding, did you?"

Tears came into the girl's eyes. Unmindful of the watchers, she stooped to kiss him. I had a glimpse of blue eyes as they lifted themselves to the face of the men carrying the stretcher.

"Take him to our place," she commanded. "We'll pull him through."

And she did as I happened to know. They were married. The little dispatcher who had been the cause of it all left town never to return. I have often wondered if he thinks as does my uncle that there is no drama in the railroad game.

MOUNTAIN OF WHEAT

Two Men Face Death Before the Mad Buckle of a Drag Derailed On a Crossover

By James William Fraser

EVERY railroader has his share of thrills, whether he admits it or not. Railroading and thrills, to me, have always traveled hand in hand, or coupled together, as we might put it. The very nature of the service creates situations of danger, suspense, tenseness, and of sensation; occasions such as cannot be found in any other line of work. Not that the railroad life is one continuous round of heroism and excitement—far from it. Things ordinarily run as smooth, as calmly, and as regular in the daily routine of the road as in any other line of business. But once in awhile some incident stands out from among the rest as more than commonplace in the history of the road.

The biggest thrill that ever tingled my spine happened to me about fifteen years ago. On the night of August 24, 1914, to be exact. So vividly does the experience live in my memory that the date and even the day of the week is stamped indelibly on my mind. That night when another incident in the history of one of our leading railroads was written; the night of a wreck with carloads of grain turning topsy-turvy in the air, hurdling end over end, thundering, crashing, breaking into splinters.

And in the midst of all that frightfulness were two helpless human beings.

At that time I was working on the Rock Island at the old Twenty-Eighth Street yard in Rock Island, Illinois. The time was, as you may remember, the beginning of the Great War in Europe, and traffic in that part of the country was just beginning to feel the effects of the increase. Especially in the wheat haul. More trains were being routed through our part to relieve the congestion up north. Trains were being rushed through to make room for more trains.

The Milwaukee and the Burlington both used a joint main line which crossed the Rock Island at the west end of our yard.

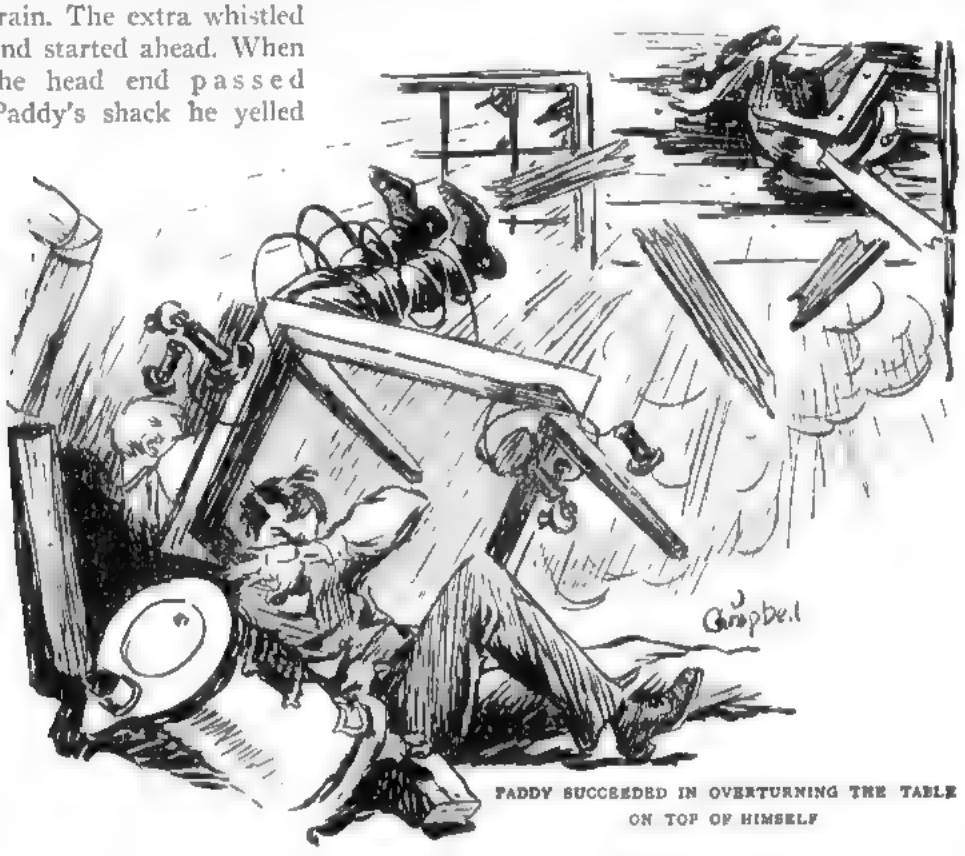
Paddy Quinn was the switch-tender and semaphore operator then, and I was the telephone clerk and his assistant at the crossing. Each had his own little shack at opposite sides of the crossing, but we spent most of our time together. We had to move fast and furious at times to keep things clear around that end, but we always found a chance to visit back and forth.

Shortly before 9 P.M. on this particular evening a big wheat drag drifted in from the West over the Milwaukee and called for the board. No. 19, the Twin City Express, was standing at the Rock Island depot a half mile away, changing engines and doing platform work. She was due to leave in twelve minutes. Although it was short time in which to cross a freight train ahead of a passenger, when the extra whistled for the board I called the dispatcher for a clearance.

"O. K.," he said; "but highball

him over. We don't want to lay out No. 19."

I signalled Paddy, and he dropped the board. I saw him step out and give the high-sign toward the waiting train. The extra whistled and started ahead. When the head end passed Paddy's shack he yelled something to the engineer. The engineer nodded his head and grinned.



PADDY SUCCEEDED IN OVERTURNING THE TABLE ON TOP OF HIMSELF

I remember now how I stood in the doorway of my own shack admiring the two monstrous locomotives that wheezed and snorted as they crept slowly past with the heavy cargo of wheat.

As soon as the train was rolling freely Paddy grabbed onto a passing car and rode over to my place. Together we stood in the doorway watching the extra gather speed. *Click-click, click-click; click-click, click-click.* The trucks hammered a regular staccato over the crossing frogs, the reports coming faster every minute.

In a few more minutes, I figured, the train would be clear, and I went to report to our dispatcher. Passing a window, I glanced out. The sight across the tracks gave me a genuine start. Sparks were shooting in bright irregular streams from the trucks of one of the speeding cars. At the same time I heard that unmistakable clattering and thumping that told only too well what was wrong.

"Look, Paddy, she's dragging a brake beam!" I yelled.

Paddy must have heard it, too. He shoved his head out the door and looked.

Afterward he told me what he saw —a big fifty-ton capacity grain car

plunging across the ground and looking like it was about to meet him face to face. He gave a wild yell and leaped backward into the room, knocking me sprawling over the stove. Dazed and mad, I staggered to my feet, wondering for a moment what was happening.

The noise outside was hideous. Roaring, crashing, banging—huge cars loaded to capacity with grain being dragged off the rails in the wake of the derailed leader, and all running wild.

Then they began to pile up—one upon the other. Rolling, tossing, pitching, tearing through each other like an army of huge giants in ferocious battle. A flying truck crashed through the roof as if it were merely breaking an eggshell. The end of a car tore through one corner of the shack.

Paddy had jumped upon the phone table with the intention of leaping through a window. Forty feet below that particular window was a muddy slough, backwater from the Mississippi River. A dangerous jump through the glass into darkness and down onto the rocks below, but to him it seemed the only chance of escape.

Somehow in leaping to the table he became entangled in the telephone wires. Trying to free himself by kicking only made the situation worse. In a few seconds all three instruments with a maze of dangling wires and cords, were wrapped securely around his legs. In the next spasm of struggling he succeeded in overturning the table on top of himself.

Looking back upon the situation now, it seems ridiculously funny; but it was quite a serious matter then. We were hopelessly trapped in that frail wooden building with a pitching, bucking mass of wrecked freight cars on all sides that threatened to crush us any instant.

Paddy continued to fight madly to free himself. Man, wires, table and chairs mixed in a whirling maelstrom in the corner. Bruised from my fall over the stove as well as being dazed and badly frightened, I simply stood swaying in the middle of the floor waiting for the end.

It was all over in less time than it takes to tell. For an instant after the cars stopped milling everything was as silent as death itself. The reaction of the stillness was so uncanny that I imagined that we had actually departed from the earth.

Yardmen came running to the scene. White-faced and shaking, Paddy finally dragged himself free from his predicament. For revenge I let him crawl out of it the best way he could, while I tried to find an exit from the shack. Finally by pulling away a portion of the shattered building we were able to creep through a natural tunnel in the wreckage and reach the outside. We found ourselves wading through a mountain of wheat that was still pouring out of the shattered cars. Wheat ran like water over the ground; in places it reached to our armpits as we plowed through. For awhile it looked like we had escaped the wreck only to be buried and smothered in that dangerous flow of shifting grain that kept pouring down upon us.

Following the escape, we momentarily forgot the exciting experience and jumped in to help clear things up. Hours later the Rock Island main was opened, then we turned in for a good sleep.

It was days later, though, before the last sign of wheat and wreckage was cleared from the right of way.

Now when I read of the boys overseas who passed through barrages of shell-fire I can in a way appreciate how

such miracles can happen. Thirteen loaded cars of wheat piled in confusion around two helpless beings without leaving so much as a scratch on either of them!

By the way, if any of you boys ever happen to meet with Paddy Quinn, ask him about that little mix-up he had with the telephones back in Rock Island.

THE STOLEN JAIL

The Railroad Men Tore Up a Town When the Circus Grifters Got Hard

By George L. Banks

"HEY, Rube! Hey, Rube!" The cry brought the circus employees running from every direction.

"Railroad men!"

At that ringing yell, deep-throated and echoing, fully two-thirds of the men in the audience leaped to their feet and hurried toward the center of disturbance, which was somewhere outside the main tent.

"Don't go!" pleaded the *one* girl, catching me by the coat.

Gently I released her fingers and gave them a hurried squeeze.

"My dear, I am a railroad man," I said, and then hurried toward the entrance.

"Go back to your seats; it's all over," shouted the circus folks, alarmed at this new giant they had awakened.

But the cries and blows outside told the railroad men better, and they pressed on toward the scene of the battle.

Near the tent door I found myself near G. W. Williams, then superintendent of water supplies on the C. M. & St. P.

"What happened, G. W.?" I asked him as we crowded out to where the yells were violating the usual night silences of that little Missouri town.

"As near as I can find out, some of the railroad boys got robbed in a shell game and made a kick," he replied. "The town marshal took the railroad boys off to jail, but while he was gone some other railroaders wrecked the shell-game outfit and threw the gambler that run it in the town horse-trough. He yelled, 'Hey, Rube!' and our boys yelled, 'Railroad men!' You had better go back to your girl. This looks like a tough scrap, and you are nothing but a kid."

"I am a railroad man," I asserted stoutly, though I had just turned seventeen and was trembling all over from excitement. In spite of my red hair, I had never really had a fight in my life. The first time was swiftly coming.

"Go back," said a burly circus employee, suddenly barring our way.

"Go to hell," was my companion's answer, as his fist shot out.

The chap had started to raise his own fist, but went suddenly white and went down in a huddled heap. Then two other circus men jumped at Williams, one from each side. I grabbed

one of them around the neck and choked him until he turned all his attention to me. We both went down and rolled outside the tent.

Here it was even worse than inside. A half hundred individual fights were going on all over the grounds, and from every direction came the circus

town officials to fleece the railroad men out of their hard-earned cash by manipulating every sort of gambling game invented.

But though the town officials could be depended on not to interfere in anything short of murder, in all their careful fixing of things the circus

A HALF HUNDRED INDIVIDUAL FIGHTS WERE GOING ON ALL OVER THE GROUNDS

war cry of "Hey, Rube!" answered in an ever increasing volume by the defiant cry of "Railroad men!" as the news of the fray spread up town and down to the bunk cars. New railroad men hurried to the circus grounds.

The Milwaukee was building to Kansas City then, and the Santa Fe down along the Missouri River was racing toward the same destination. The circus had struck the little town just after the monthly pay day on both roads.

By paying liberal graft money they had gained the tacit consent of the grafters had forgot to consider the railroad men themselves.

There were fully two thousand of these in that little town of perhaps seven hundred inhabitants normally. And the entire circus outfit did not number over a hundred men.

So as new railroad men swarmed into the fray the cry of "Hey, Rube!" grew fainter, and the full-throated yell of "Railroad men!" went to the sky like a battle slogan.

My own particular adversary was a man grown, but he had that pasty complexion that a man soon gets when he

tries to live on whisky instead of ordinary food, and his blows were surprisingly weak.

I didn't know a thing about fighting, but my toil-hardened muscles put strength behind the clenched fists that I handled so awkwardly. I hit him everywhere at once, and finally he broke from me and ran.

Just outside the tent door I caught sight of Mr. Williams. His coat was gone and his shirt torn, and a scratch on his nose was bleeding slightly, but the Irish in him was just beginning to come to the surface. Like myself, he was looking for more worlds to conquer.

"Hey!" he called toward the circus crowd. "Some one of you holler 'Hey, Rube!' I've just got started."

But the circus crowd, for once, failed to respond, They had bit off more than they could chew, and they knew it.

Well, we railroad men did not press our advantage. We left the big tent alone, but what few of the games that had not closed were unceremoniously wrecked.

Then some one said, "They have got five of our railroad men in their six-by-ten jail because the boys objected to being cheated."

And the crowd of railroad men surged toward the jail. The grafting city marshal and his half dozen deputies suddenly went missing, and they took the jail keys with them.

"Get an ax and chop the door off its hinges!" yelled a half dozen voices in unison.

A dignified gray-haired man climbed on a dry goods box and waved his hand at us in a way that made us grow suddenly silent.

"Boys," he said in a quiet, clear voice, "your fellow railroad workers may have been wrongly arrested; that will be decided when they are tried. Meanwhile I warn you that the sheriff of the county has been sent for, and beg of you to do nothing rash." He climbed down off the box.

Just then the work train pulled in on the siding down in the cut about fifty feet below where the jail stood, and the engineer and brakies waved their hands at us. Of course they could not leave their train, but they wanted us to know they were in full sympathy with us.

"Load your old jail on one of the flat cars," called one of the brakemen, "and we will haul it down to the Crooked River Bridge and throw it over the dump."

There were muffled objections to this plan from inside the jail, however, until its inmates were assured that they would first be released.

The old gentleman tried to speak again, but was gently lifted from his box and told quietly but firmly to go home.

Then we got some long poles and pried up the jail and put pieces of iron pipe under it for rollers, and the little jail moved right along until we landed it, without mishap, on one of the flat cars.

But now came another obstacle. The station agent had got wind of what was happening and telegraphed division headquarters, and just as we were about to pull out with our jail the engineer and conductor were each handed a message.

"There's only one way you can steal this jail," the engineer told us, "and that is to overpower the train crew and take possession of the train." And he winked at us.

Say, that train crew was overpowered instanter.

Just before we pulled out I happened to glance up on the bank, where a small crowd of town people had gathered, and caught sight of my own particular sweetie in the crowd. She had been crying, and a lump rose in my own throat in sympathy. She was the first real sweetheart I had ever had, and you know how hard these first affairs hit us red-heads.

But I swallowed hard and said to myself, "I am a railroad man," and went on helping the gang fix the jail so it would not fall off the flat car. Then the overpowered train crew pulled the train out on the main track.

"Here comes the sheriff," yelled a score of voices. But the work train, with a prolonged and derisive hoot from the engine, pulled off down the track.

We saw the sheriff and his deputies riding along the bank above us, and greeted his calls for us to stop the train with loud hoots. He brandished his revolver at us, but never fired a shot, and the train, gaining headway, soon left him behind.

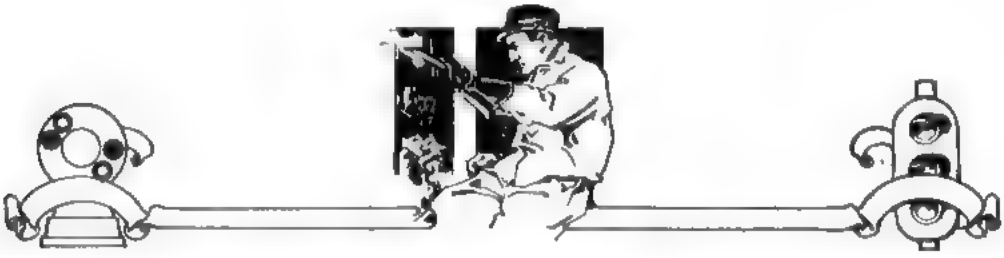
We took the stolen jail down to the high embankment over the river, where we pried off its door with picks and crowbars and released its occupants. Then we rolled it down the embankment into the river.

My sweetie didn't speak to me for three whole days after we stole the jail, but finally I coaxed her to make up.

"I think you acted perfectly horrid, all the same," she protested poutingly.

"Perhaps I did," I acknowledged diplomatically, as I slipped my arm around her waist and kissed the most kissable pair of lips I ever kissed. "Perhaps I did, sweetheart; but you see, my darling, I am a railroad man."

"I like railroad men," she cooed, snuggling closer and giving me another kiss.



AIR CAPITAL LIMITED

JUST as Hollywood became a capital of the motion picture world and New York of the theatrical world, so Wichita, Kansas, seems destined to become the most important air center.

The recent inauguration of a new train between St. Louis and Wichita, on the Frisco Lines, was an important railroad event. This train was called "The Air Capital Limited," and was equipped with chair cars, Pullmans, diner and club cars, and its schedule was keyed up three hours faster than the best former service on that particular stretch. The Air Capital Limited is known on the time card as No. 11, and it leaves St. Louis at 8 P.M. It arrives in Wichita at 11.15 A.M. the following morning. The opposite run is known as No. 302, and leaves Wichita at 9 P.M., arriving in St. Louis at 11.35 A.M.

The inauguration of this train brought about a general revision of time on the system. Virtually every through train was keyed up to greater speed.

ON THE SPOT

Where Our Readers, Our Writers and the Editor Gather to Railroad to Their Hearts' Content

JOY on the main line at the sight of this book?

How many old timers are thumbing these pages to-day recognizing therein the return of an old pal!

How many of the younger heads who have come up in the ranks since RAILROAD MAN'S MAGAZINE last appeared in 1919 are making acquaintance with these pages and thereby a new friend!

We don't like to pop off about it, but we feel pretty danged certain that the "rails," high and low, far and wide, green and aged, are getting a wholesome wallop from the fact that RAILROAD MAN'S is back with a bang and will be right there on the card the first of every month with full tonnage of fiction and features from first to last.

When we laid the groundwork some months ago for the return of this magazine, we first made a quiet effort to ascertain from yard and roundhouse, main line and office, whether the men and women of the railroad desired its return. Far and wide we made personal inquiries, not only in the East, but in the North, the West and the South, and the answer was an enthusiastic and unanimous *yes*.

We then took into consideration many angles from which to build and the ultimate decision was to give to you a magazine accurate in railroad detail and railroad terms, written for railroad men and their families and for that part of the general reading public which might have a keen interest in railroad life; edited by men hard drilled in the school of railroad experience. In short, a magazine of the rails, for the rails, by the rails.

No one is more conscious of the fact than we are, that the railroad has a literature of its own. It is our aim to collect and set forth that literature and to preserve it. It is our ambition to give lavishly of our best to make this magazine complete in every sense of

the word. We call upon you who read to help us by making and submitting suggestions. We invite your criticisms and your consideration and we ask only for the opportunity to please you.

THE CREW

A word about the men who climb aboard to make up this splendid first section.

The names of Charles Frederick Carter, James W. Earp and J. E. Smith are familiar to every old timer whoever read RAILROAD MAN'S as it used to be. We are proud that they are back with us again. Mr. Smith will be remembered for his long time series "The Observations of a Country Station Agent," a tremendously popular feature and we in the Editorial Cab will swear by Mr. Smith's brand of humor any time

Mr. Earp will be remembered for his tales of "Jones, the Boomer" and many a laugh has he wrung from boomer hearts with his photographic portrayal of the most colorful characters which have ever crossed the railroad horizon.

Mr. Carter is in a class by himself when it comes to railroad feature writing. He has been everywhere and has seen everything. He has lived strange experiences in railroading and has covered strange ground.

Don Waters, the author of that gripping railroad novel which begins in this number, is of the younger school, comparatively speaking. He has lived his life up and down the main lines of the United States. A one-time boomer, he knows an engine inside and out from pilot beam to tank drawhead, and what is more, he knows railroad men.

E. S. Dellinger who contributed "Redemption for Slim," and who will be represented again next month with as powerful a novelette as ever has been written, cut his teeth in train service through the Ozarks. He, too, is of the younger school, but old enough to know the terrific demands railroading can make on a human being.

John A. Thompson, one-time fireman on an Alaskan streak of rust, later graduated into the mining engineering class, but has never lost his love of the railroad as his stories will testify.

Gilson Willets and Gene Clark are a strange combination. Mr. Willets is the son of the late Gilson Willets of RAILROAD MAN'S fame some years ago. His father covered many thousands of miles as staff correspondent for RAILROAD MAN'S in those other days. Young Willets is now a newspaper columnist and Gene Clark is the railroad brains of the combination. Gene is an old timer in the West and has lived many harrowing tales. Russell Hays is widely known for his knowledge of hobo life.

In the issues to come we hope to have back with us Emmet F. Harte who will be remembered for his "Honk and Horace" series; Horace H. Herr, Lydia M. Dunham O'Neil and many other favorites of RAILROAD MAN'S not so long ago. The names of Charles W. Tyler and Robert Fulkerson Hoffman will be seen soon again. They will be remembered for their powerful and compelling stories of railroading in the high country; their ability to catch the humor and the pathos and the drama in a man's game.

A WORD ABOUT DEPARTMENTS

In this number of the new RAILROAD MAN'S you will find a department devoted to personal *thrill* experiences. We want to invite every railroad man and woman who has lived through some tale worth the telling, to

contribute to this department. Payment will be made promptly on accepted stories, and all that we ask is that you tell the story in your own words and write it on one side of the paper with a typewriter, if possible. Because of the very nature of these stories, the writers must verify, so far as possible, their facts for our files.

It is desirable to mention names and places where the experiences took place unless to do so obviously would be embarrassing to railroad officials or men in the ranks who are in active service to-day.

So get busy, old timers, and do a little recollecting!

Do it well and it will be worth money to you!

Don't aim at literature, but tell your story simply, briefly and swiftly!

Of course, you have noticed "By the Light of the Lantern," in which we will endeavor to answer your every question, and we want to impress upon you the fact that this department is yours to use whenever there is anything you want to know. Don't fail to write and ask us.

In the January number we are going to bring to you a brand new department designed to aid the ambitious man and woman who would step to the job ahead in railroading. Announcement of this department in detail is contained elsewhere in this number.

SIGNS OF WELCOME

Here are a few letters picked at random which make us feel pretty good:

EDITOR, RAILROAD MAN'S:

TO me the most welcome thing I have heard in many a year was the announcement of the new magazine for railroad men. It will be the only break the railroad man has had since Mr. Munsey gave up the publication of RAILROAD MAN'S MAGAZINE some years ago, and how I have yearned for something to take the place of that magazine.

While in New York a short time ago I bought up all the old RAILROAD MAN'S MAGAZINES I could find because to me there is nothing quite so fascinating as a long streamline Pacific loping up the rails with a string of Pullmans behind the tank, and how I love to read about it!

Allow me to wish you the best of success.—A. W., Ann Harbor, Michigan.

EDITOR, RAILROAD MAN'S:

ALTHOUGH not in the railroad field when the RAILROAD MAN'S MAGAZINE was in its heyday, I have heard much about it and noted, from back copies, the fine assortment of railroad material.

From my own editorial viewpoint I welcome the return of this magazine because it will undoubtedly stimulate increased effort in our field to put out creditable company publications.

You are certainly reëntering the field when it is surcharged with interest, and the survey of your first issue sounds as if you had taken full advantage of this condition.—Robert M. Van Sant, Editor, *B. & O. Magazine*.

DEAR EDITOR:

IT was a real satisfaction to learn that my old friends of the Frank A. Munsey Company are resurrecting RAILROAD MAN'S MAGAZINE.—Judson C. Welliver, Asst. to the President The Pullman Company, Chicago, Ill.

DEAR EDITOR:

I CAN see no reason why a magazine of railroad stories cannot be made a success. It can if the reading public is educated to realize that there is much romance, an enormous amount of self-sacrifice and more hazard than there is in any other occupation in the world. There is never a trip made that railroad men do not face death or injury and they say nothing about it.

I am a locomotive engineer now employed in the electric district of the C. M. & St. P. & P Railway. I have worked in many different departments and also worked on the railroads of France during the war. I was under fire all the time while there and received one minor wound so that I feel that I know what I am talking about.

Am looking forward to the first copy of the magazine and hope that I can do something that will make your new magazine a success.—Harry Simms, Butte, Montana.

EDITOR, RAILROAD MAN'S:

WHEN we of the L. & N. learned that RAILROAD MAN'S MAGAZINE was coming back again, we only had one word to say, and that was, "*Hurrah*." Best of luck.—R. R. Roberts, Boyles, Ala.

EDITOR, RAILROAD MAN'S:

ABOUT the best news I have heard is the word about RAILROAD MAN'S MAGAZINE going to be reissued. I want to be among the first to congratulate you and your publishers on this move.

I have often wondered why one of the country's greatest industries, which has millions of dollars tied up in it, has had no adequate magazine representation. It is not because there is no market for it, neither is it because we do not have writers who can do that type of story. I believe that the publishers have been so blinded by the demand for war, air, western, detective and "confession" pulp, that they have not noticed one of the country's greatest demands—a real railroad magazine

So here's to the return of RAILROAD MAN'S and all that the name implies. Here's to the stingers, the snakes, the hogheads, the tallowpots, the ops, the gandy-dancers, the dispatchers and all the assorted tribes that we will meet in its pages. May the dispatcher give you the best of running orders and a clear track.—L. R. Ingles, St Joseph, Mo.

We thank you for those kind words, and now you've got the magazine you wanted.

EDITOR, RAILROAD MAN'S:

WE have heard by grapevine telegraph, as it were, about RAILROAD MAN'S coming back. We've just got to know if this is true. If it is you can count on the boys of the old "Mopac."—J. L. E., Ft. Smith, Ark.

J. L. E., by the way, was duly informed that the rumor he had heard was true.

MY DEAR EDITOR:

I AM indeed glad to know that the RAILROAD MAN'S MAGAZINE is to be issued again, as the old magazine certainly had an appeal for railroad men like myself.—Carl Rudolph, Editor, *Brotherhood of Locomotive Engineers Journal*, Cleveland, Ohio.

Here's hoping we continue to please you, Brother Rudolph.

THE BOOMERS' CORNER

In this issue you have, perhaps, by this time read Mr. Earp's story on the boomer and what is becoming of him. It is the desire of the editor, who lays claim to having been one of the boomin'est of the boomers, to provide a little corner back in this department for those remaining boomers to use as their own.

If you want each other's addresses just write a letter and say so. If you want to swap correspondence, we'll try to help you. If you want to unburden your woes on our editorial shoulders —go ahead.

Personally, we think that all the boomers that are left in the world today should get together and form an association for the prevention of the extinction of the boomers. Just to get this corner started, the editor is issuing a call for the whereabouts of Jack Gilligan, last seen by the editor when the two of them traveled together along the lines of the Northern Pacific. In fact, Brother Gilligan and the editor parted company in a harvest field outside of Jamestown, North Dakota. Gilligan was a fireman and a boomer from away back.

Pipe up, old rails, if you know where Jack is, and shoot along a line about him; and you, Jack, if you see this, come across.

Then there is Sam Sale, another boomer fireman who, in company with the editor, arrived in Amarillo, Texas, on an afternoon in the fall of the year of 1914 for the purpose of seeking employment. Sam and the editor had a suitcase which they owned jointly and which contained their joint wardrobe. Sam and the editor were separated and, unfortunately for the editor, Sam had charge of the suitcase. Hey, Sam! Whar is my clothes?

Come on, you boomers, let's preserve our breed. Just address your mail to The Boomers' Corner, RAILROAD MAN'S MAGAZINE, 280 Broadway, New York.

MISSING PERSONS

This department will be glad to print, for our readers, requests for information on missing friends and kinsmen.

THE POET'S CORNER

You old-timers probably remember what a popular feature this was in

RAILROAD MAN'S of other days. We used to read some smacking good poems contributed from here and there. Perhaps some readers would like reprints of old favorites. All you have to do is make your wishes known. We have, meanwhile, a little verse which Don Waters found written upon the side of an old switch shanty in chalk. It is called "The Fireman's Prayer." We make no claims for its perfection as verse, but we turn it over to you for what you may think it is worth.

THE FIREMAN'S PRAYER

The cold rain fell and turned to sleet,
Number 6 slugged up the grade an hour late for a meet,
The wind was high and the steam was low;
The drag was long and heavy to go;
The coal was dirty and full of slack,
And lumpy was the roadbed, rough the track.
The grates were locked and the flues did blow;
The drivers slipped on the sleet and snow.
The fireman's arms felt heavy as lead;
As he leaned weary on his shovel, he sadly said:
"Oh! Good Lord! How I wish I was dead!"

Just then the crown sheet let go with a roar;
Off from its hinges flew the firedoor.
It hit the fireman in the middle of the chest;
On the back of the tender he came to rest;
Wrapped around the brakewheel with the coal boards in his lap,
With his shovel for a pillow, he took a nap.
He opened his eyes, saw the steam and smoke;
He felt his bones to see if they were broke,
And he muttered: *"Good Lord! Can't you take a joke?"*

COUPONS

Now here is something new. Every month we are going to print a coupon back here and the idea is for you to fill out a coupon from three consecutive issues, send them in to us and receive for your pains the original drawing of any illustration in RAILROAD MAN'S MAGAZINE you desire, so speak up.

"HERE'S MY VOTE"

Editor,
RAILROAD MAN'S MAGAZINE,
280 Broadway, N. Y. C., N. Y.

The stories I like best in this issue of the magazine are as follows:

1.....

2.....

3.....

4.....

5.....

I did not like.....

because.....

Name.....

Street.....

City.....*State*.....

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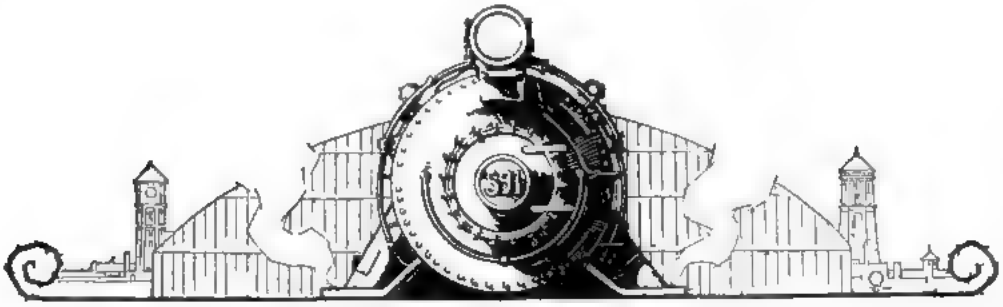
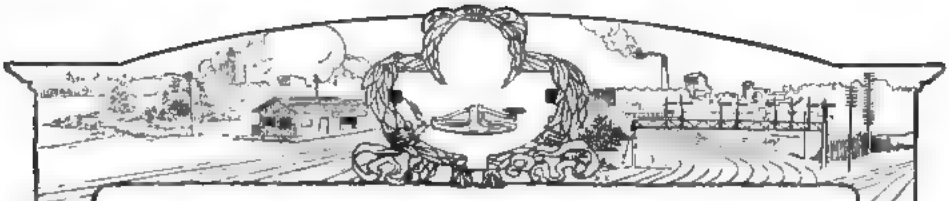




The January Consist

E. S. Dellinger, who introduced himself to you in this issue of RAILROAD MAN'S MAGAZINE, with his gripping story, "Redemption for Slim," will head the parade next month with a powerful novelette of railroading in the southwest—

"LURE OF THE RAILS"

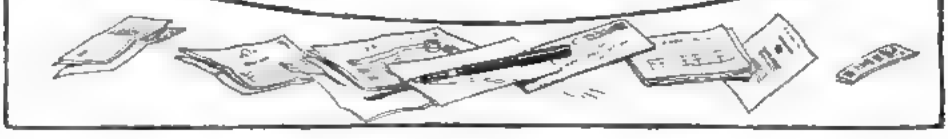
Every man who's ever fought the extra board will clench his fist and say to himself: "That's me!"

Every railroader's wife will thrill at the tenseness of this drama because she's lived it too.

"COUPLING UP"

Charles Frederick Carter will take you back into the history of the automatic coupler. Illustrated with photographs.

Don Waters's serial, of course, will be continued with another walloping episode, and there will be a fine selection of short stories and articles by the best railroad writers.



Which Job do YOU Want?

Auto Expert

Lawyer

Telephone Expert

Business Manager

Try for it This way

Civil Engineer

Men don't just **fall** into easy jobs of **big pay** positions—they prepare for the big chance **before** it comes. Make up your mind today what you want to be, then take the first step **at once.** You don't have to go to college to get ahead. Other men have gone there for you and have put the things they learned there and through years of practical experience into easily understood books which give you a short cut to a **better** and a **bigger** job.

We have picked 13 of the best paying professions and have published for your benefit new editions of the most practical, the most valuable books we have ever printed on the subjects covered. These books are all beautifully bound and are profusely illustrated. These books are all complete, they enable you to fully master the entire subject but are so clearly written and everything so simply told that **anyone** can understand them. The free examination enables you to **prove** their value without risk.

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Automobile Engineering, 5 volumes, over 2,000 pages	$24.80
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American Law and Practice (with reading course), 13 volumes 6,000 pages, illustrated	49.80
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The Sky's the Limit

By Erle Stanley Gardner

A curious tale of space traveling and startling adventures on a weird planet of Venus.

DECEMBER 7th

ARGOSY

On Sale December 4th.

A Road At Stake

By Francis Lynde

A great railroad novel by a well-known writer; tense and exciting from start to finish.

DECEMBER 14th

ARGOSY

On Sale December 11th.

ARGOSY
10c
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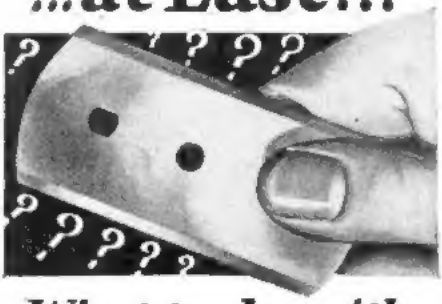

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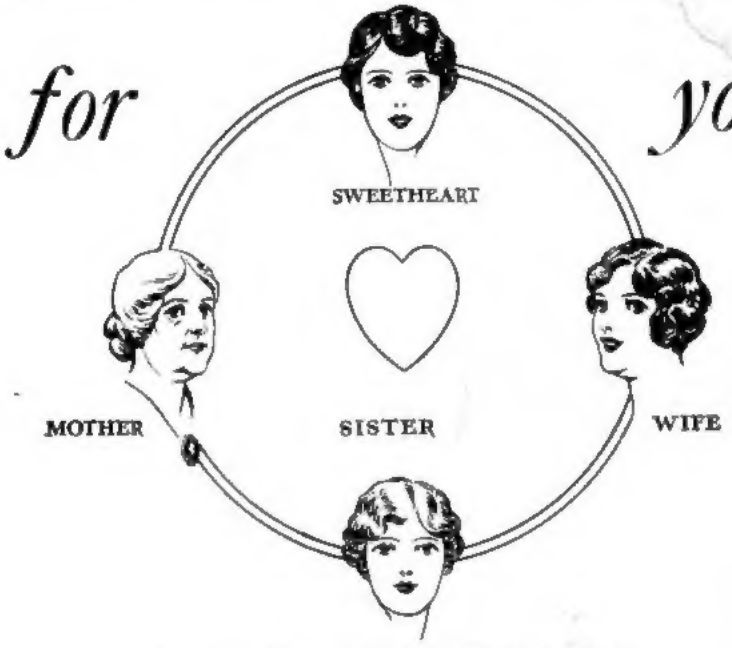

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